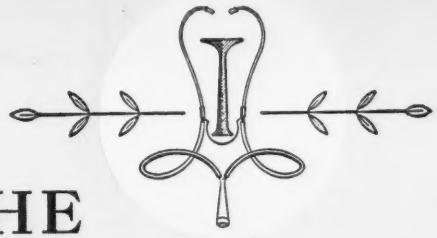

THE Journal of the Kansas Medical Society

DECEMBER
1960

VOL LXI
NO XII

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TOPEKA, KANSAS DEC 19 1960

for every phase of cough... comprehensive relief

AMBENYL® EXPECTORANT

AMBENYL EXPECTORANT quickly comforts the coughing patient because it is formulated to relieve all phases of cough due to upper respiratory infections or allergies. Combining Ambodryl®—potent antihistaminic; Benadryl®—the time-tested antihistaminic-antispasmodic; and three well-recognized antitussive agents, AMBENYL EXPECTORANT:

• soothes irritation • quiets the cough reflex • decongests nasal mucosa • facilitates expectoration • decreases bronchial spasm • and tastes good, too.

Each fluidounce of AMBENYL EXPECTORANT ◈ contains:

Ambodryl® hydrochloride (bromodiphenhydramine hydrochloride, Parke-Davis)	24 mg.
Benadryl® hydrochloride (diphenhydramine hydrochloride, Parke-Davis)	56 mg.
Dihydrocodeinone bitartrate	⅙ gr.
Ammonium chloride	8 gr.
Potassium guaiacolsulfonate	8 gr.
Menthol	q.s.
Alcohol	5%

Supplied: Bottles of 16 ounces and 1 gallon.

Dosage: Every three or four hours—adults, 1 to 2 teaspoonfuls; children ½ to 1 teaspoonful. 27160

◈ Exempt narcotic

PARKE, DAVIS & COMPANY
Detroit 32, Michigan

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Volume LXI, Number 12—December, 1960

The JOURNAL of the KANSAS MEDICAL SOCIETY

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IN A "PROBLEM" ARTHRITIC

In rheumatoid arthritis with diabetes mellitus. A 54-year-old diabetic with a four-year history of arthritis was started on DECADRON, 0.75 mg./day, to control severe symptoms. After a year of therapy with 0.5 to 1.5 mg. daily doses of DECADRON, she has had no side effects and diabetes has not been exacerbated. She is in clinical remission.*

New convenient b.i.d. alternate dosage schedule: the degree and extent of relief provided by DECADRON allows for b.i.d. maintenance dosage in many patients with so-called "chronic" conditions. Acute manifestations should first be brought under control with a t.i.d. or q.i.d. schedule.

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*From a clinical investigator's report to Merck Sharp & Dohme.

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Dexamethasone

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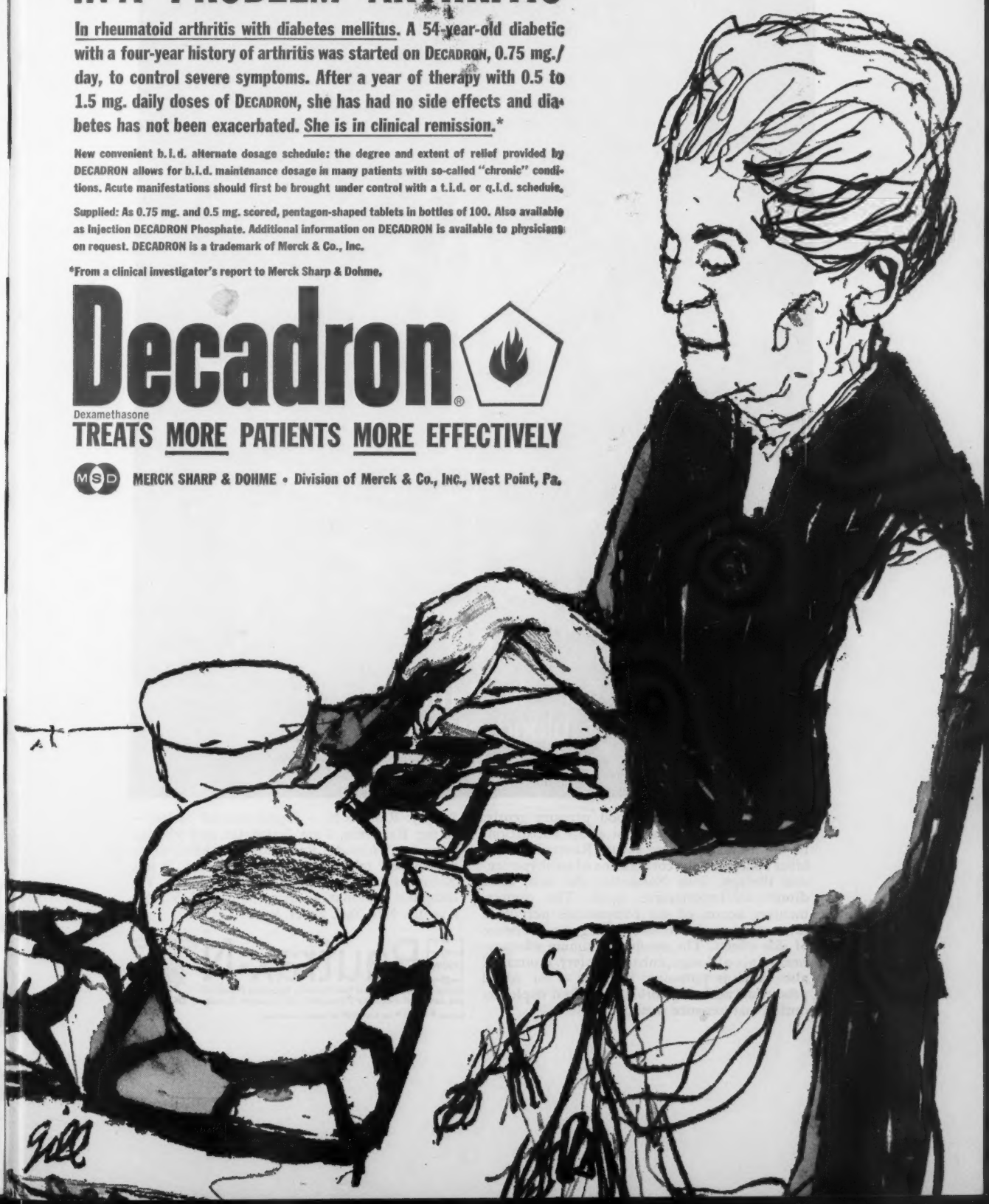

Rautrax-N lowers high blood pressure gently, gradually . . . protects against sharp fluctuations in the normal pressure swing. Rautrax-N combines Raudixin, the cornerstone of antihypertensive therapy, with Naturetin, the new, safer diuretic-antihypertensive agent. The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects. The result: Maximum effectiveness, minimal dosage, enhanced safety. Rautrax-N also contains potassium chloride – for added protection against possible potassium depletion during maintenance therapy.

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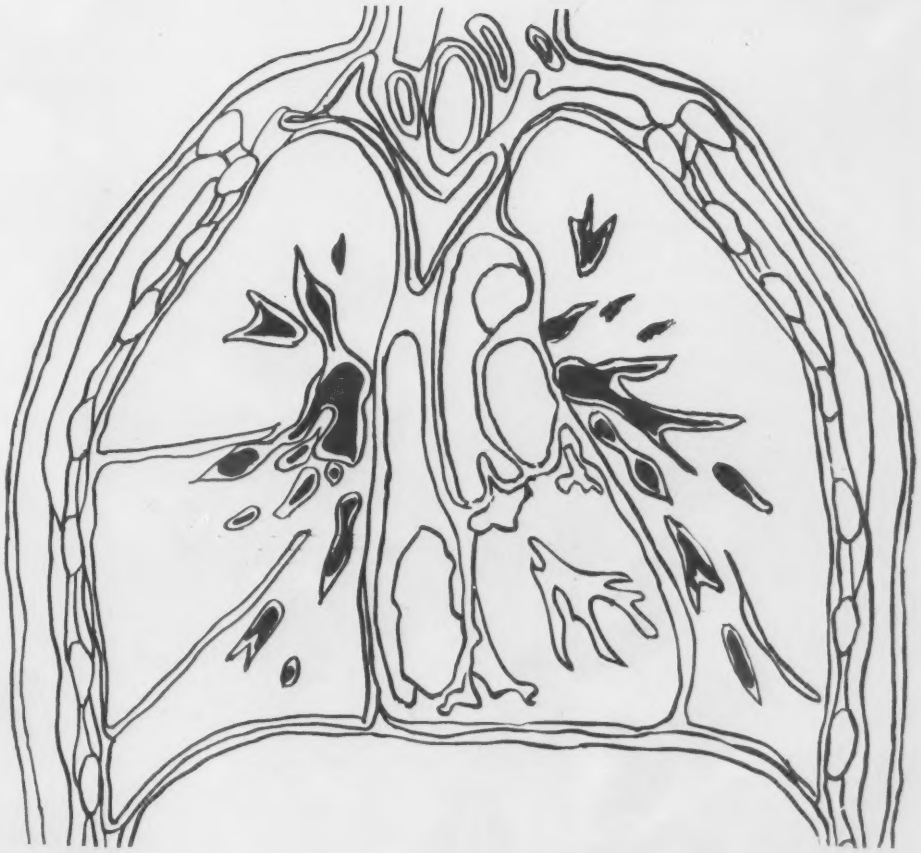
for chronic bronchitis

Tetrex® capsules

The Original Tetracycline Phosphate Complex

U.S. PAT. NO. 2,731,609

effective control of pathogens...with an unsurpassed record of safety and tolerance



SUPPLY: TETREX Capsules—tetracycline phosphate complex—each equivalent to 250 mg. tetracycline HCl activity. Bottles of 16 and 100.

TETREX Syrup—tetracycline (ammonium polyphosphate buffered) syrup—equivalent to 125 mg. tetracycline HCl activity per 5 ml. teaspoonful. Bottles of 2 fl. oz. and 1 pint.

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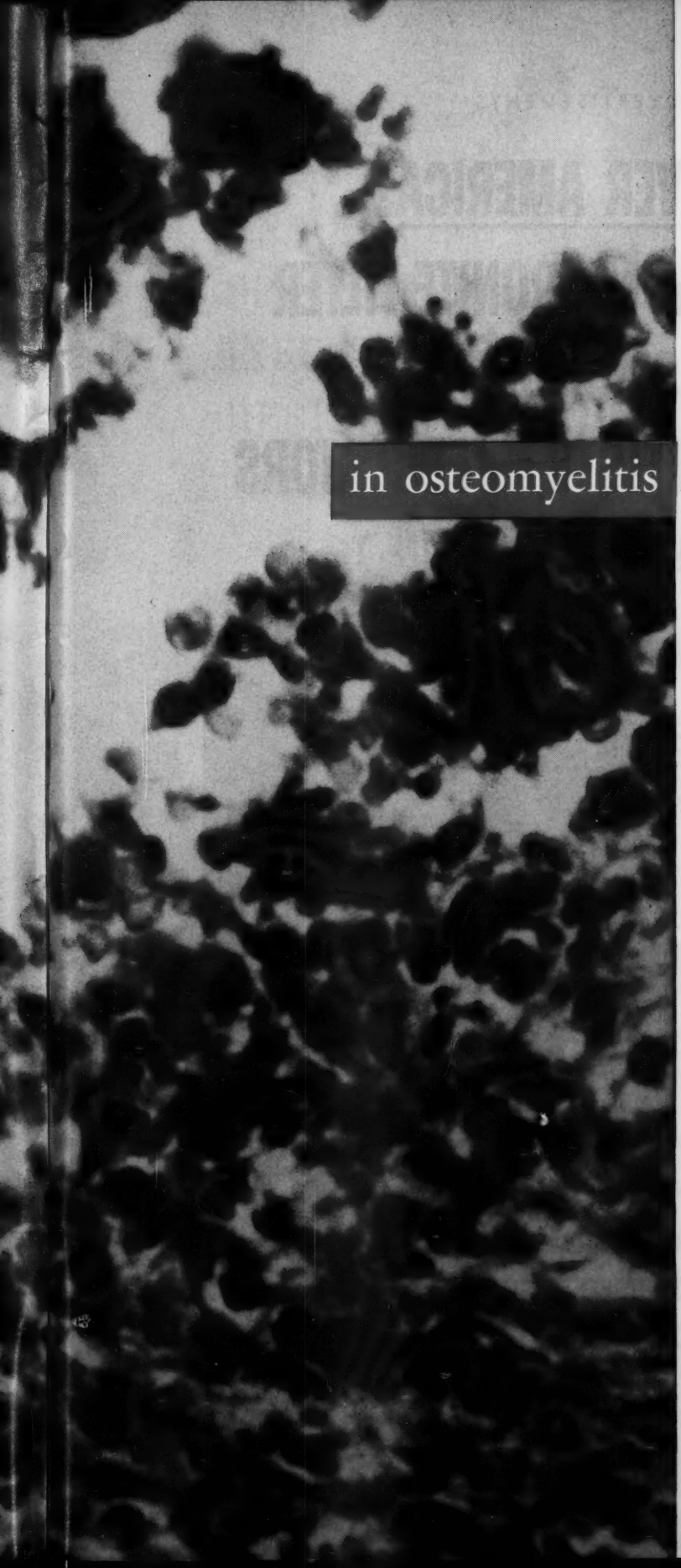
BRISTOL™

Bone section: erosion and purulent exudate



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Supplied: Capsules, each containing Panmycin* Phosphate (tetracycline phosphate complex), equivalent to 250 mg. tetracycline hydrochloride, and 125 mg. Albamycin,* as novobiocin sodium, in bottles of 16 and 100.

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your broad-spectrum antibiotic of *first* resort

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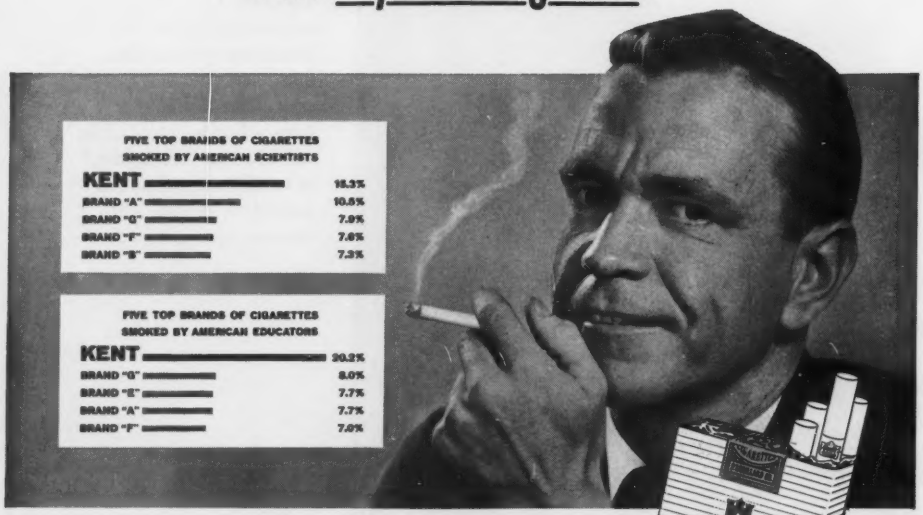
KENT with the MICRONITE FILTER IS SMOKED BY MORE SCIENTISTS and EDUCATORS

than any other cigarette!*



KING-SIZE, REGULAR-SIZE OR CRUSH-PROOF BOX

THIS does not constitute a professional endorsement of Kent. But these men, like millions of other Kent smokers, smoke for pleasure, and choose their cigarette accordingly.

The rich pleasure of smoking Kent comes from the flavor of the world's finest natural tobaccos, and the free and easy draw of Kent's famous Micronite Filter.

If you would like the booklet, "The Story of Kent", for your own use, write to: P. Lorillard Company—Research Department, 200 East 42nd Street, New York 17, New York.

For good smoking taste, it makes good sense to smoke KENT

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ANNOUNCING—
SPECIFICALLY FOR
INFECTIONS DUE TO
"RESISTANT" STAPHYLOCOCCI

AN ENTIRELY NEW SYNTHETIC
"STAPH-CIDAL" PENICILLIN

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

UNIQUE—BECAUSE IT
RETAINS ANTIBACTERIAL
ACTIVITY IN THE PRESENCE OF
STAPHYLOCOCCAL PENICILLINASE
WHICH INACTIVATES
OTHER PENICILLINS

Bristol™

NEW SYNTHETIC PENICILLIN FOR "RESISTANT" STAPH

CUT HERE FOR FILING

UNIQUE SYNTHETIC "STAPH-CIDAL" PENICILLIN

STAPHCILLIN™

(sodium dimethoxyphenyl penicillin)

For Injection

DESCRIPTION

STAPHCILLIN is a unique new synthetic parenteral penicillin produced by Bristol Laboratories for the specific treatment of staphylococcal infections due to resistant organisms. Its uniqueness resides in its property of resisting inactivation by staphylococcal penicillinase. It is active against strains of staphylococci which are resistant to other penicillins.

Each dry filled vial contains: 1 Gm. STAPHCILLIN (sodium dimethoxyphenyl penicillin), equivalent to 900 mg. dimethoxyphenyl penicillin activity.

INDICATIONS

STAPHCILLIN is recommended as specific therapy only in infections due to strains of staphylococci resistant to other penicillins, e.g.:

Skin and soft tissue infections: cellulitis, wound infections, carbuncles, pyoderma, furunculosis, lymphangitis and lymphadenitis.

Respiratory infections: staphylococcal lobar or bronchopneumonia, and lung abscesses combined with indicated surgical treatment.

Other infections: staphylococcal septicemia, bacteremia, acute or subacute endocarditis, acute osteomyelitis and enterocolitis.

Infections due to penicillin-sensitive staphylococci, streptococci, pneumococci and gonococci should be treated with Syncillin® or parenteral penicillin G rather than STAPHCILLIN. Treponemal infections should be treated with parenteral penicillin G.

DOSAGE AND ADMINISTRATION

STAPHCILLIN is well tolerated when given by deep intragluteal or intravenous injection.

As is the case with other antibiotics, the duration of therapy should be determined by the clinical and bacteriological response of the patient. Therapy should be continued for at least 48 hours after the patient has become afebrile, asymptomatic and cultures are negative. The usual duration has been 5-7 days.

Intramuscular route: The usual adult dose is 1 Gm. every 4 or 6 hours. Infants' and children's dosage is 25 mg. per Kg. (approximately 12 mg. per pound) every 6 hours.

Intravenous route: 1 Gm. every 6 hours using 50 ml. of sterile saline solution at the rate of 10 ml. per minute.

**Warning:* Solutions of STAPHCILLIN and kanamycin should not be mixed, as they rapidly inactivate each other. Data on the results of mixing STAPHCILLIN with other antibiotics are being accumulated.

DIRECTIONS FOR RECONSTITUTION

Add 1.5 ml. sterile distilled water or normal saline to a 1 Gm. vial and shake vigorously. Withdraw the clear, reconstituted solution (2.0 ml.) into a syringe and inject. The reconstituted solution contains 500 mg. of STAPHCILLIN per ml. Reconstituted solutions are stable for 24 hours under refrigeration.

For intravenous use, dilute the reconstituted dose in 50 ml. of sterile saline and inject at the rate of 10 ml. per minute.

*This statement supersedes that in the Official Package Circulars dated September and/or October, 1960.

(continued)

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MICROBIOLOGICAL AND PHARMACOLOGICAL PROPERTIES

In vitro studies show that STAPHCILLIN is a bactericidal penicillin with activity against staphylococci resistant to penicillin G. Strains of staphylococci so far tested have been sensitive to STAPHCILLIN *in vitro* at concentrations of 1-6 mcg. per ml. These levels are readily attained in the blood and tissues by administration of STAPHCILLIN at the recommended dosage. This unique attribute is probably due to the fact that STAPHCILLIN is stable in the presence of staphylococcal penicillinase. STAPHCILLIN also resists degradation by *B. cereus* penicillinase. The antomicrobial spectrum of STAPHCILLIN with regard to other microorganisms is qualitatively similar to that of penicillin G; but considerably higher concentrations of STAPHCILLIN are required for bactericidal activity than is the case with penicillin G.

STAPHCILLIN is rapidly absorbed after intramuscular injection. Peak blood levels (6-10 mcg./ml. on the average after a 1.0 Gm. dose) are attained within 1 hour; and then progressively decline to less than 1 mcg. over a 4 to 6 hour period. It is poorly absorbed from the gastrointestinal tract. STAPHCILLIN is rapidly excreted by the kidney.

As shown by animal studies, STAPHCILLIN is readily distributed in body tissues after intramuscular injection. Of the tissues studied, highest concentrations are reached in the kidney, liver, heart and lung in that order; the spleen and muscles show lower concentrations of the antibiotic. STAPHCILLIN diffuses into human pleural and prostatic fluids, but its diffusion into the spinal fluid has not yet been completely studied. However, one patient with meningitis showed a significant concentration in his spinal fluid while on STAPHCILLIN therapy.

Toxicity studies with STAPHCILLIN and penicillin G in animals show that they have approximately the same low order of toxicity.

Certain staphylococci can be made resistant to STAPHCILLIN in the laboratory, but this resistance is not related to their penicillinase production. During the clinical trials, no STAPHCILLIN-resistant strains of staphylococci were observed or developed; the possibility of the emergence of such strains in the clinical setting awaits further observation.

PRECAUTIONS

During the clinical trials, several mild skin reactions, e.g., itching, papular eruption and erythema were observed both during and after discontinuance of STAPHCILLIN therapy. Patients with histories of hay fever, asthma, urticaria and previous sensitivity to penicillin are more likely to react adversely to the penicillins. It is important that the possibility of penicillin anaphylaxis be kept in mind. Epinephrine and the usual adjuvants (antihistamines, corticosteroids) should be available for emergency treatment. Because of the resistance of STAPHCILLIN to destruction by penicillinase, parenteral *B. cereus* penicillinase may not be effective for the treatment of allergic reactions. Information with regard to cross-allergenicity between penicillin G, penicillin V, phenethicillin (Syncillin) and STAPHCILLIN is not available at present. If superinfection due to Gram-negative organisms or fungi occurs during STAPHCILLIN therapy, appropriate measures should be taken.

SUPPLY

List 79502 – 1.0 Gm. dry filled vial.

BRISTOL LABORATORIES · SYRACUSE, NEW YORK
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NEW SYNTHETIC PENICILLIN FOR "RESISTANT" STAPH

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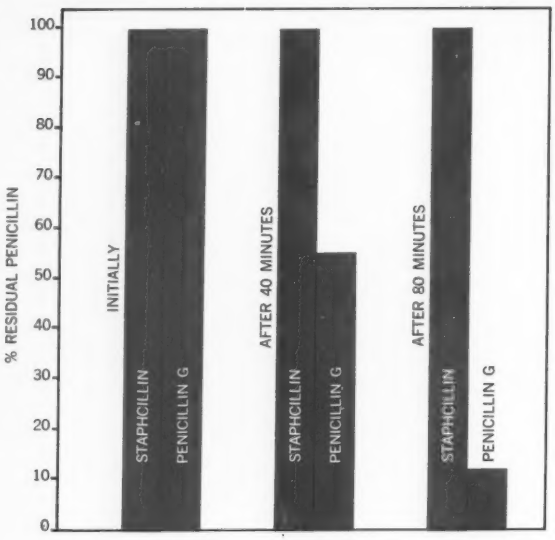
UNIQUE SYNTHETIC "STAPH-CIDAL" PENICILLIN



In the presence of staphylococcal penicillinase, STAPHCILLIN remained active and retained its antibacterial action. By contrast, penicillin G was rapidly destroyed in the same period of time. *(After Gourevitch et al., to be published)*

Specifically for "resistant" staph...

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

The failure of staphylococcal infections to respond to penicillin therapy is attributed to the penicillin-destroying enzyme, penicillinase, produced by the invading staphylococcus.

Unlike other penicillins:

1 STAPHCILLIN is effective because it retains its antibacterial activity despite the presence of staphylococcal penicillinase.

2 The clinical effectiveness of STAPHCILLIN has been confirmed by dramatic results in a wide variety of infections due to "resistant" staphylococci, many of which were serious and life-threatening.

Like other penicillins:

STAPHCILLIN has no significant systemic toxicity. It is well tolerated locally, and pain or irritation at the injection site is comparable to that following the injection of penicillin G. *In occasional cases, typical penicillin reactions may be experienced.*

PROFESSIONAL INFORMATION SERVICE – The attached Official Package Circular provides complete information on the indications, dosage, and precautions for the use of STAPHCILLIN. If you desire additional information concerning clinical experiences with STAPHCILLIN, the Medical Department of Bristol Laboratories is at your service. You may direct your inquiries via collect telephone call to New York, PLaza 7-7061, or by mail to Medical Department, Bristol Laboratories, 630 Fifth Ave., N. Y. 20, N. Y.

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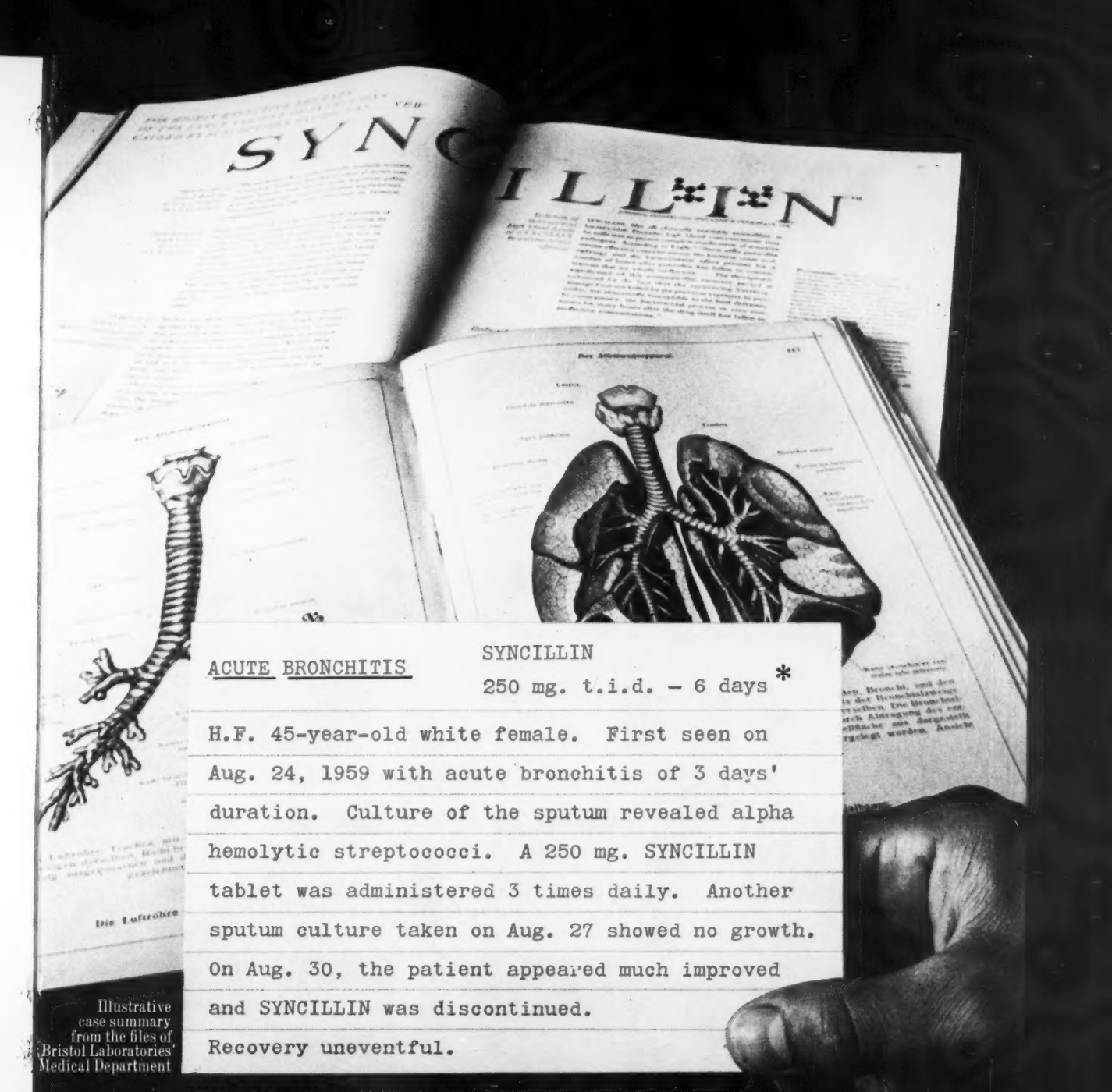

ACUTE BRONCHITIS

SYNCILLIN
250 mg. t.i.d. – 6 days *

H.F. 45-year-old white female. First seen on Aug. 24, 1959 with acute bronchitis of 3 days' duration. Culture of the sputum revealed alpha hemolytic streptococci. A 250 mg. SYNCILLIN tablet was administered 3 times daily. Another sputum culture taken on Aug. 27 showed no growth. On Aug. 30, the patient appeared much improved and SYNCILLIN was discontinued. Recovery uneventful.

Illustrative case summary from the files of Bristol Laboratories' Medical Department

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(phenoxyethyl penicillin potassium)

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A dosage form to meet the individual requirements of patients of all ages in home, office, clinic, and hospital:
Syncillin Tablets – 250 mg. (400,000 units)... Syncillin Tablets – 125 mg. (200,000 units)
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Syncillin Pediatric Drops – 1.5 Gm. bottles. Calibrated dropper delivers 125 mg. (200,000 units)

*Streptococcal infections should be treated for at least 10 days to prevent the development of rheumatic fever and as prophylaxis against bacterial endocarditis in susceptible patients.

Complete information on indications, dosage and precautions is included in the circular accompanying each package.

BRISTOL LABORATORIES, Div. of Bristol-Myers Co., SYRACUSE, N.Y.

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Neo-Synephrine hydrochloride relieves the boggy feeling of colds immediately and safely, without causing systemic toxicity or chemical harm to nasal membranes. Turbinates shrink, sinus ostia open, ventilation and drainage resume, and mouth-breathing is no longer necessary.

Gentle Neo-Synephrine shrinks nasal membranes for from two to three hours without stinging or harming delicate respiratory tissues. Post-therapeutic turgescence is minimal. Neo-Synephrine does not lose its effectiveness with repeated applications nor does it cause central nervous stimulation, jitters, insomnia or tachycardia.

Neo-Synephrine solutions and sprays produce shrinkage of tissue without interfering with ciliary activity or the protective mucous blanket.

For wide latitude of effective and safe treatment, Neo-Synephrine hydrochloride is available in nasal sprays for adults and children; in solutions from ⅛% to 1%; and in aromatic solution and water soluble jelly.

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NEO-SYNEPHRINE®
(Brand of phenylephrine hydrochloride)
hydrochloride
NASAL SOLUTIONS AND SPRAYS

A special formulation for those troublesome cases of acute nonspecific diarrhea

DONNAGEL®-PG

Donnagel® with paregoric equivalent

Provides greater assurance of more comprehensive relief in acute self-limiting diarrheas through the time-tested effectiveness of two outstanding antidiarrheals—DONNAGEL and a paregoric equivalent. *Tastes good, too!*

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Kaolin	6.0 Gm.
Pectin	142.8 mg.
Natural belladonna alkaloids	
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atropine sulfate	0.0194 mg.
hyoscine hydrobromide	0.0065 mg.
Phenobarbital (¼ gr.)	16.2 mg.

SUPPLIED: Pleasant-tasting banana flavored suspension in bottles of 6 fl. oz.

Also available:

DONNAGEL® with NEOMYCIN — for control of bacterial diarrheas.

DONNAGEL® — the basic formula — when paregoric or an antibiotic is not required.

A. H. ROBINS CO., INC.
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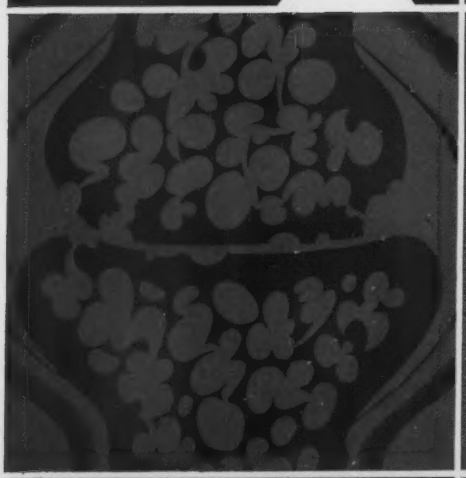
Robins

in rheumatic disorders

whenever aspirin proves inadequate

Sterazolidin®

brand of prednisone-phenylbutazone



Even in the more transient rheumatic disorders, an anti-inflammatory effect more potent than that provided by aspirin is often desirable to hasten recovery and get the patient back to work. By combining the anti-inflammatory action of prednisone and phenylbutazone, Sterazolidin brings about exceptionally rapid resolution of inflammation with relief of symptoms and restoration of function. Since Sterazolidin is effective in low dosage, the possibility of significant hypercortisonism, even in long-term therapy, is substantially reduced.

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ADROYD® N+

oxymetholone
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■ PROMOTES AND MAINTAINS POSITIVE NITROGEN BALANCE ■ HELPS RESTORE APPETITE, STRENGTH, AND VIGOR ■ BUILDS FIRM, LEAN MUSCULAR TISSUE ■ FAVORABLY INFLUENCES CALCIUM AND PHOSPHORUS METABOLISM ■ PROMOTES A SENSE OF WELL-BEING

ADROYD PROVIDES HIGH ANABOLIC ACTIVITY — The tissue-building potential of ADROYD exceeds its androgenic action to the extent that masculinizing effects have not been a problem in clinical use.* Other advantages of ADROYD are: Neither estrogenic nor progestational. No significant fluid retention. Apparent freedom from nausea, vomiting, and other gastrointestinal disturbances. Effective by the oral route.

See medical brochure, available to physicians, for details of administration and dosage.

Supplied: 10-mg. scored tablets, bottles of 30. 49760

*Reports to Department of Clinical Investigation, Parke, Davis & Company, 1958 and 1959.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, DETROIT 32, MICHIGAN

"Gratifying" relief from

for your patients with
'low back syndrome' and
other musculoskeletal disorders

POTENT muscle relaxation
EFFECTIVE pain relief
SAFE for prolonged use

stiffness and pain

"gratifying" *relief from stiffness and pain in 106-patient controlled study (as reported in J.A.M.A., April 30, 1960)*

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Kestler, O.: Conservative Management of "Low Back Syndrome", J.A.M.A. 172: 2039 (April 30) 1960.

FASTER IMPROVEMENT—79% complete or marked improvement in 7 days (Kestler)

EASY TO USE—Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

SUPPLIED: 350 mg., white tablets, bottles of 50.
For pediatric use, 250 mg., orange capsules, bottles of 50.

Literature and samples on request.

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(CARISOPRODOL, WALLACE)

WALLACE LABORATORIES, CRANBURY, NEW JERSEY

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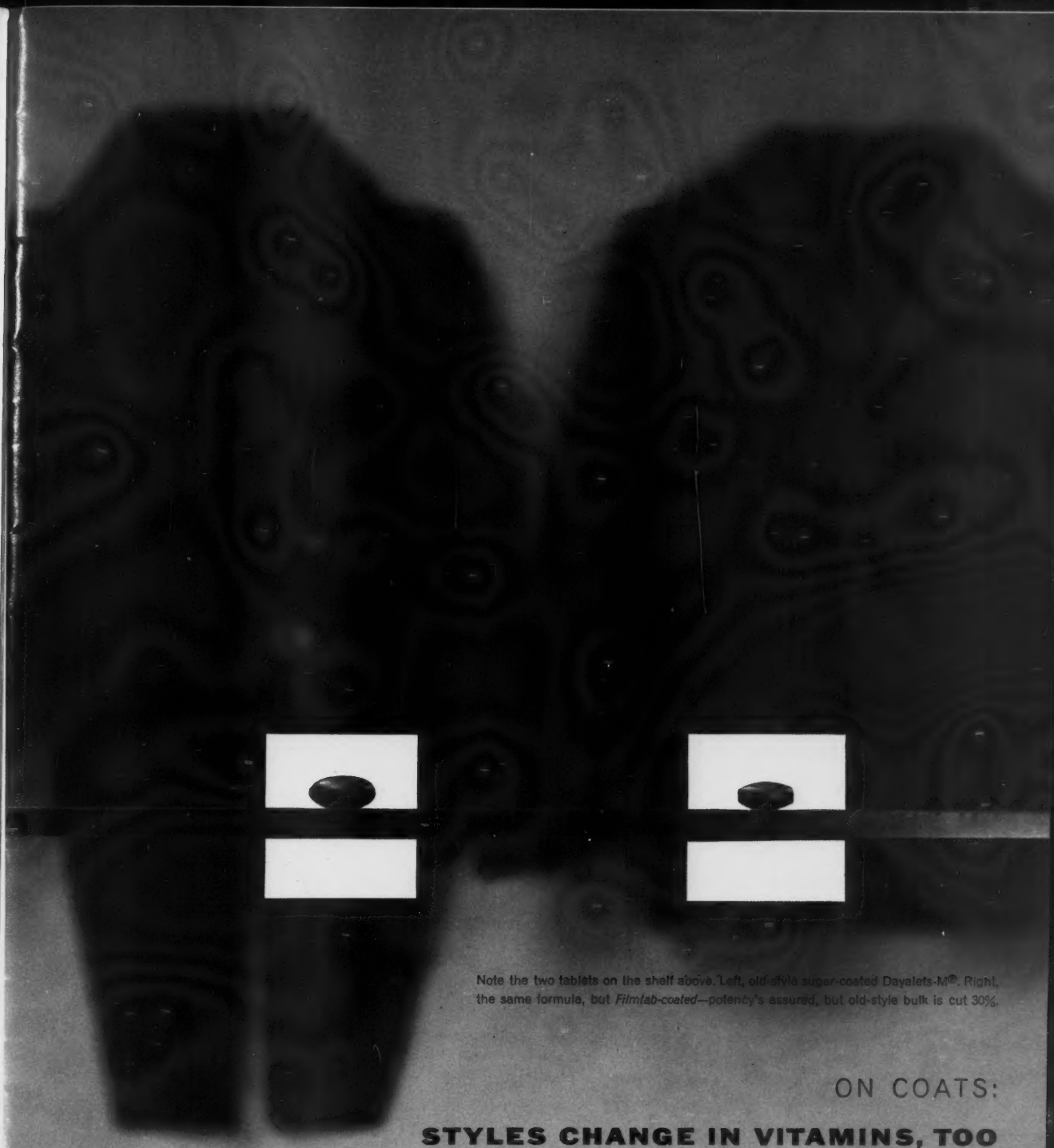
Your patient will often respond promptly to Neocholan therapy. It greatly increases the flow of thin, nonviscid bile and corrects biliary stasis by flushing the biliary system. It also relaxes intestinal spasm, resulting in an unimpeded flow of bile and pancreatic juice into the small intestine. Neocholan helps to promote proper digestion and absorption of nutrients. It also encourages normal peristalsis by restoring intestinal tone.

Each Neocholan tablet provides:
Dehydrochloric Acid Compound, P-M Co. 265 mg. (Dehydrochloric Acid, 250 mg.); Homatropine methylbromide 1.2 mg.;Phenobarbital 8.0 mg.
Supplied in bottles of 100 tablets.

PITMAN-MOORE COMPANY
DIVISION OF ALLIED LABORATORIES, INC.
INDIANAPOLIS, INDIANA



Note the two tablets on the shelf above. Left, old-style sugar-coated Dayalets-M®. Right, the same formula, but *Filmtab-coated*—potency's assured, but old-style bulk is cut 30%.

ON COATS:

STYLES CHANGE IN VITAMINS, TOO

Coat styles change—whether it's a blazer or a B-complex vitamin. Not long ago, for instance, "Vitamins by Abbott" were dressed up with a new-style coating—*Filmtab®*.

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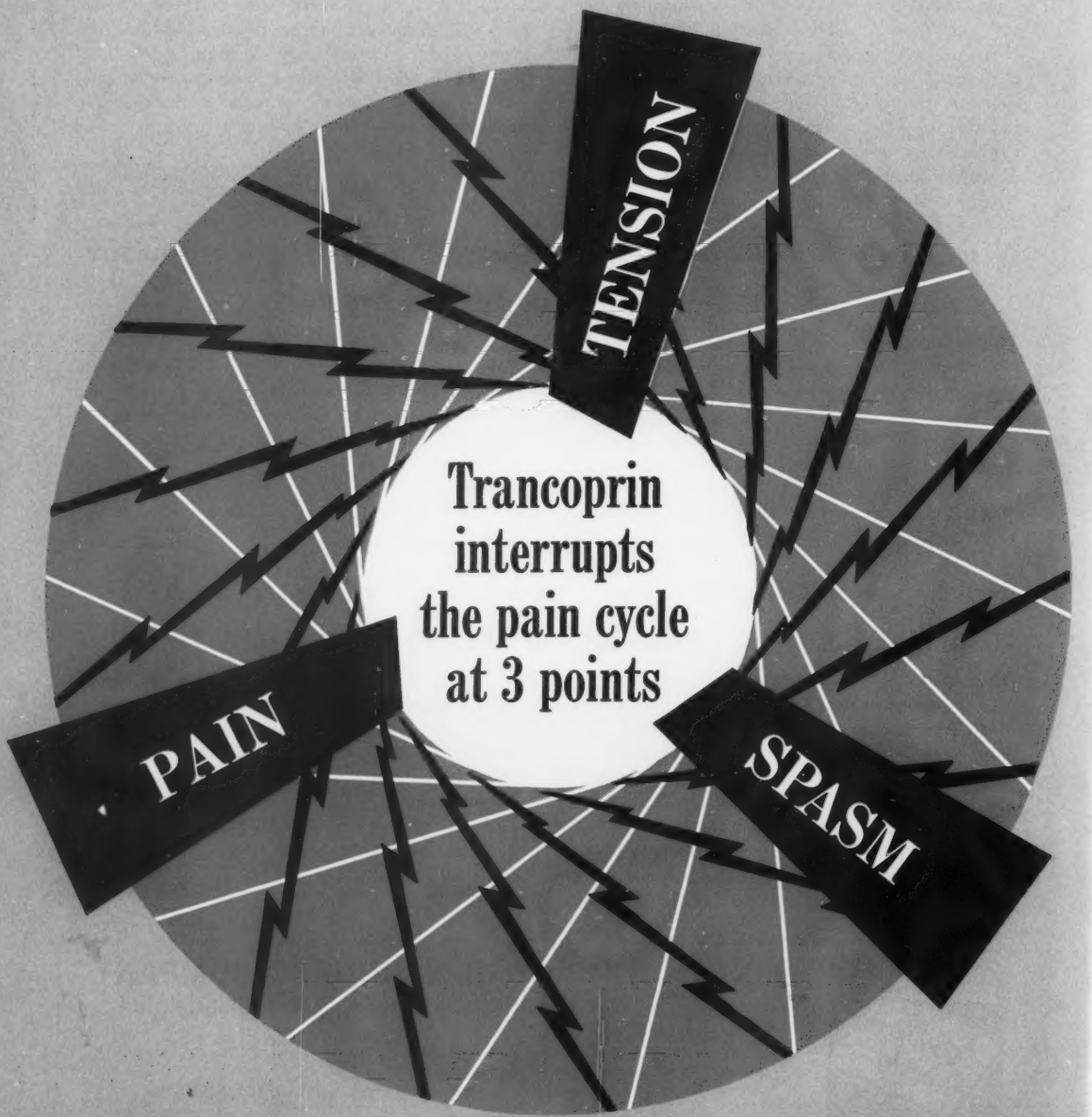

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References: 1. DeNyse, D. L.: *M. Times* 87:1512, Nov., 1959. 2. Ganz, S. E.: *J. Indiana M. A.* 52:1134, July, 1959. 3. Gruenberg, Friedrich: *Current Therap. Res.* 2:1, Jan., 1960. 4. Kearney, R. D.: *Current Therap. Res.* 2:127, April, 1960. 5. Lichtman, A. L.: *Kentucky Acad. Gen. Pract. J.* 4:28, Oct., 1958. 6. Mullin, W. G., and Epifano, Leonard: *Am. Pract. & Digest Treat.* 10:1743, Oct., 1959. 7. Shanaphy, J. F.: *Current Therap. Res.* 1:59, Oct., 1959. 8. Collective Study, Department of Medical Research, Winthrop Laboratories. 9. Hergesheimer, L. H.: An evaluation of a muscle relaxant (Trancopal) alone and with aspirin (Trancoprin) in an industrial medical practice, to be submitted.

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1. Stephens, V. C., *et al.:* J. Am. Pharm. A. (Scient. Ed.), *48*:620, 1959.
2. Salitsky, S., *et al.:* Antibiotics Annual, p. 893, 1959-1960.
3. Reichelderfer, T. E., *et al.:* Antibiotics Annual, p. 899, 1959-1960.
4. Kuder, H. V.: Clin. Pharmacol. & Therap., in press.

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Pericarditis With Effusion

A Chronic Nonspecific Case Is Presented and Discussed

DAVID LUKENS, M.D.; C. R. OPENSHAW, M.D., F.A.C.S.; *and* R. C. TOUT, M.D., *Hutchinson*

A case of chronic nonspecific pericarditis with effusion successfully treated with subtotal pericardiectomy is reported. The outstanding features of the disease are discussed and the serious nature of its potentially disabling complications is stressed. The pertinent literature is briefly reviewed and the reasons for advising surgical treatment are stated.

Early extensive pericardiectomy is recommended as the procedure of choice in the management of this disease.

CHRONIC NONSPECIFIC PERICARDITIS with effusion is an unusual disorder which presumably follows acute benign idiopathic pericarditis or hemorrhagic pericarditis. Since 1950 several reports[1, 2, 3] have called attention to the fact that nonspecific pericardial effusions can persist for many months or even years, with ultimate production of severe disability and death as the result of the long term deleterious effects of cardiac tamponade or constrictive pericarditis. Recent papers[5, 8, 9] have stressed the importance of extensive resection of the pericardium prior to the development of constrictive pericarditis or irreversible myocardial changes. It is the purpose of this report to describe a patient treated with pericardial excision, to comment on several points of interest which this case illustrates, and to review the development of our present knowledge with respect to the management of such problems.

Case Presentation

This is a 25-year-old housewife who was discovered to have pericarditis with effusion in July of 1957. She had experienced mild substernal distress following an upper respiratory infection, but otherwise had no significant symptomatology and was able to carry out her usual activities as a mother and housewife. General physical examination revealed a pericardial friction rub and typical evidence of pericardial effusion without cardiac tamponade. Aside from these findings no significant abnormalities were made out. Examination of the blood showed Hemoglobin 13.5 gm. per cent, WBC 5700 with a normal differential, sed. rate 20 mm. in 60 minutes, heterophile agglutination negative, total proteins 7.6 gm. per cent, albumin 5.5, globulin 2.1, and L. E. Cell preparation negative. Urinalysis was entirely normal. Tuberculin skin test was negative. Electrocardiogram showed normal findings except for slight elevation of ST V6. Chest x-ray showed an enlarged, nondescript cardiac shadow compatible with a rather mas-

sive pericardial effusion *(Figure A)*. Pericardial paracentesis revealed watery, chocolate colored fluid which on laboratory investigation showed a red cell count of 18,000, white cells 53,000 (100 per cent lymphs), total protein 11.9 gm. per cent. Gram stain, acid

Figure A. Original chest X-ray showing an enlarged cardiac shadow compatible with pericardial effusion.

fast stain, routine and acid fast cultures showed no evidence of bacteria or tubercle bacilli. Cholesterol content was 83 mgm. per cent, total lipids 575 mgm. per cent, and a cell block revealed no tumor cells. Following aspiration of fluid, air was introduced into the pericardial space and follow-up x-ray examination showed the pericardial membrane to be delicate *(Figure B)*. Several pericardial taps were performed until the cavity was relatively dry. However, fluid rapidly reaccumulated and repeated aspirations were required during the next two months. On October 9, 1957, an exploration of the pericardial cavity with biopsy of the pericardium was done. The pericardium was observed to be involved in a generalized chronic inflammatory reaction, manifested by a grayish appearance of the pericardial surface and mild thickening of the membrane. No localized lesion was found in the pericardium or mediastinum, and the epicardial surface was seen to be normal in appearance. Microscopic examination of the biopsy specimen showed a nonspecific inflammatory reaction.

Following operation the pericardial effusion again rapidly reaccumulated and it was necessary to perform a paracentesis at intervals of every three weeks in order to prevent cardiac tamponade. Over a period of time the character of the pericardial fluid changed in appearance from chocolate to grayish white. The amounts of exudate obtained at the time of aspiration averaged 800 cc. Serial chest x-rays showed only changes of pericardial effusion, no mediastinal or pulmonary lesions being seen at any time. Many diagnostic maneuvers were employed in an effort to demonstrate the etiological agent responsible for this patient's disease and none was found. Because of the fact that the character of the pericardial fluid suggested chyle, an unsuccessful attempt to demonstrate the presence of a chylous fistula by means of a radioactive fat uptake study was carried out. Fat tagged with I 131 was administered to the patient and serial determinations of radioactivity were made on the patient's serum and pericardial fluid. These studies

Figure B. Chest X-ray following pericardial paracentesis with replacement of fluid by air. Note the normal sized heart, air fluid level and delicate pericardial membrane.

failed to reveal any significant difference in the uptake of radioactivity in the pericardial fluid when compared with the serum. During November and December of 1957 the patient was given therapeutic doses of adrenal cortical steroids without beneficial result.

Pericardiectomy Performed

It was decided that if the patient showed no improvement after a year of observation and nonspecific treatment, operation should be recommended. Since no decrease in the rate of fluid formation had been observed, she was advised to undergo pericardiectomy, and this procedure was carried out on July 19, 1958. Subtotal excision of the pericardium was accomplished through a transverse bilateral thoracotomy incision which provided excellent exposure. At operation the pericardium was found to be only slightly more thickened than it had been previously, measuring approximately 5.0 mm. However, the entire epicardial surface had changed considerably in appearance and had obviously undergone early fibrotic change, although no myocardial atrophy was apparent. Again, microscopic examination of the pericardium failed to reveal any specific pathologic changes. The patient made an uneventful recovery from operation and was able to resume full activity within a period of four weeks. Follow-up examinations revealed a small pleural effusion in the left side of the chest which rapidly reabsorbed *(Figure C)*, and the postoperative electrocardiogram was entirely normal. Eight months following surgery the patient has no subjective or objective evidence of cardiac disability.

The Fluid's Nature

This case is a typical example of chronic nonspecific pericarditis with effusion in that the onset of her disease was insidious and its progression was slow without any significant disability so long as the degree of effusion was controlled. The diagnosis of pericarditis was readily apparent, but a definite etiologic diagnosis was elusive. The character of the pericardial fluid deserves some comment. With the exception of the first several taps, the fluid was a grayish white color and over a period of time its protein content gradually increased. These facts led to the conclusion that the inflammatory reaction had become self perpetuating, despite the possibility that the original inciting agent had disappeared many months previously. The milky color of the fluid prompted most observers who saw it for the first time to comment that the patient must have a chylous fistula, hence the vigorous diagnostic effort to demonstrate this lesion. Happily such was not the case and the prognosis was accordingly improved. Of primary significance was the development of fibrotic epicardial changes during the interval between the two operations. No doubt, had this process been allowed to proceed unarrested, constrictive changes and myocardial atrophy would have resulted, with the usual attendant disability.

Because of the relatively low incidence of this disease, experience with its treatment is necessarily limited, and present day concepts have been slow to evolve. Barker and Johnston in 1950 described three patients with long standing pericardial effusions, all of whom were operated on late, with poor results. The malignant course of tuberculous pericarditis long ago forced thoracic surgeons into the concept of radical pericardiectomy, although at first this procedure was undertaken only when constrictive pericardial changes were demonstrable and the underlying disease was considered to be quiescent. After effective antituberculous chemotherapy became available, Holman and Willett in 1951 described two patients in whom subtotal pericardiectomy was carried out during the acute exudative stage of tuberculous pericarditis with effusion. Good results were obtained in both of these cases. This approach was subsequently applied to the problem of nonspecific pericarditis and in 1953 Yu, *et al.* described a patient with long standing pericardial effusion who was subjected to radical pericardiectomy with good postoperative result. In 1954 Williams and Soutter described an operation involving pericardial biopsy with creation of a pleuropericardial window to allow drainage of pericardial fluid into the left pleural space. Good recovery was observed in three patients with chronic nonspecific

Figure C. Chest X-ray taken four months after pericardiectomy showing normal sized heart shadow.

pericarditis so treated. Proudfit and Elfer likewise reported satisfactory results in five cases of hemorrhagic pericarditis treated in this manner. Mannix and Dennis in 1953 described three patients with nonspecific pericardial effusions treated by extensive pericardial resection, all of whom did well. Shumacker and Harris added two more cases of this disease managed successfully with subtotal pericardiectomy.

Why Perform Subtotal Pericardiectomy

In the present case a pleuro-pericardial window purposely was not created at the first operation, because this procedure was performed for diagnostic purposes only. In addition it seemed desirable to avoid contaminating the pleural space, because of the uncertainty with respect to the etiology of the underlying disease. The decision to perform a subtotal pericardiectomy at the second operation was based on the following reasons:

1. The patient had failed to respond to 12 months of nonspecific treatment with periodic taps and cortical steroids.

2. It seemed apparent that the inflammatory process had become self perpetuating, and, despite reported good results with creation of a pleuro-pericardial window, complete removal of the secreting membranous surface seemed to offer a more definitive approach. Subsequent occlusion of a pericardial window by the adjacent lung was considered to be a real possibility.

3. Using a bilateral surgical approach, extensive pericardiectomy is technically quite feasible. The entire epicardial surface of the heart can be visualized and any serious fibrotic complications can be successfully managed.

4. The major portion of the disease is eliminated and the development of potentially disabling constrictive pericarditis, fibrosing epicarditis and myocardial atrophy is prevented.

415 West Second
Hutchinson, Kansas

References

1. Barker, P. S., and Johnston, F. D.: Chronic Pericarditis With Effusion, Circulation, 2:134, July, 1950.
2. Rabiner, S. F., Specter, L. S., Ripstein, C. B., and Schleker, A. A.: Chronic Constrictive Pericarditis as a Sequel to Acute Benign Pericarditis, New England Journal of Medicine, 251:425, September 9, 1954.
3. Silverstone, F. A.: Recurrent Heart Failure With Tamponade due to Pericardial Effusion, Ann. Int. Med. 41:937, April, 1955.
4. Holman, E., and Willett, F.: Treatment of Active Tuberculous Pericarditis by Pericardiectomy, J.A.M.A. 146:-1, May 5, 1951.
5. Yu, P. N. G., Lovejoy, F. W., Joos, H. A., Nye, R. E., and Simpson, J. H.: An Unusual Case of Massive Pericardial Effusion With Hemodynamic Studies, Ann. Int. Med. 39:-928, October, 1953.
6. Williams, C., and Soutter, L.: Pericardial Tamponade, Arch. Int. Med. 94:571, October, 1954.
7. Proudfit, W. L., and Elfer, D. B.: Diagnosis and Treatment of Cardiac Pericarditis by Pericardial Biopsy, J.A.M.A. 161:188, May 19, 1956.
8. Mannix, E. P., and Dennis, C.: The Surgical Treatment of Chronic Pericardial Effusion and Cardiac Tamponade, Journal of Thoracic Surgery, 29:381, April, 1955.
9. Shumacker, H. B., and Harris, J.: Pericardiectomy for Chronic Idiopathic Pericarditis With Massive Effusion and Cardiac Tamponade, Surgery, Gynecology and Obstetrics, 103:535, November, 1956.

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Medical Mobilization for the Future

A Look at the Demands on Medicine In Case of Another World War

COL. JOSEPH T. CAPLES, M.C., *Ft. Leavenworth*

I HAVE BEEN ASKED to talk to you about "Medical Mobilization for the Future." Nothing that I am going to say is classified, it has all appeared in *Life* or *Time* or some other news media. A good deal of what I will say about wars in the future is speculation. It is speculation by people who know considerable about our capabilities and other people's capabilities, but it is still speculation and not doctrine nor the official policy of the Army.

A Look at the Past

Now—in order to discuss the future we should know something about what has happened in the past. The military past of the Medical Service as, indeed, of the United States Army as a whole, usually starts with the battle of Bunker Hill. Here, as in so many other wars, the patriots rushed out to fight without thinking of all of the implications of fighting. There was no provision for a Medical Service of any kind, the philosophy being that one either got killed or came through unscratched. The leading surgeon of Boston was Dr. Warren and he was killed there while serving as a Major General of the Line.

The wounded made their way back to Boston and lay in door ways and alleys as they had no other place to go. This upset the good burghers and led to the establishment of the Military Hospital, the first medical installation that belonged to the goverment of the colonies. The Medical Service of the Army that then developed for the war of the Revolution made a distinction between regimental or camp medical service and Hospital Service. A distinction that plagues us to this day. The regiments were served by regimental surgeons and surgeons' mates. They were usually procured by the colonel and they had no military rank at all. In the field they ran small regimental hospitals in tents or huts. What went to the Hospitals was usually smallpox or prolonged illnesses. The wounded died of their wounds or recovered in the field.

With the end of the war of the Revolution the army was disbanded. At one time there were only 84 men altogether and these were divided between West Point and Fort Pitt, which were arsenals.

With the approach of the war with England, the Army was enlarged but there was no change in the organization of the Medical Service. Nothing new in the way of medical service came out of it or after it, the Army again was reduced to small units serving in widely disbursed posts. Fort Leavenworth, established in 1827, was one of the frontier outposts constructed on the boundary of the forest and the plain.

CIVIL WAR WORRIES

The Civil War started out in the same pattern of medical service with the difference that Medical Officers were now commissioned by the same authority that commissioned line officers, either the state or the United States. There were also Hospital Stewards who were noncommissioned officers and there was a standard Medical Chest. All Medical Officers and Stewards were volunteers. There was no organized system of evacuation or hospitalization and even though there were two ambulances to a regiment, these were under control of the Adjutant and were usually in use for picnics or to take officers to town.

A great figure of military medicine came to the fore in the Army of the Potomac. He was Surgeon Jonathan Letterman and his first great stride forward was to obtain troops under Medical Department control to man the ambulances, the first such body of troops in American history. With his ambulance companies he organized the medical evacuation service of the Union Army. As his guide he had the work of Larrey who, as Surgeon to the Garde Imperial of the first Napoleon had organized a system of "Ambulances Volante" to tend the wounded after a battle.

After Letterman had established his evacuation means he then organized and established a series of "General Hospitals" to which the wounded were brought. In these hospitals the physicians and Hospital Stewards were persons in the military service. However the great bulk of the personnel were civilian employees but these Letterman put in uniform and trained as if they were soldiers.

A peculiarity of medical service in the Civil War was the Ambulance Boats which were fitted out by the governors of various States and which came along

Presented before the Shawnee County Medical Society at its regular meeting on November 2, 1959. The opinions expressed in this article are those of the author and do not necessarily reflect those of the Army.

rivers or the sea coast and picked up soldiers from the originating State who were sick or wounded and took them back to their home States. This they did without references to the medical authorities as to the desirability of transporting some of the injured. One writer said that these ships were crowded with the malingerers and the fakes while the real sick and wounded were left behind.

On arrival in their home States, if any physician would certify that they were unfit, these heroes received an honorable discharge.

This again is an example of an old principle that the United States wins wars, but God only knows how we do it.

There was a rather good medical service in the Confederate Army but I don't want to discuss it at this time.

When the Civil War ended the Army again disbanded and the carefully constructed support services were completely dispersed. For the long haul leading down to the Spanish War through the Indian Campaigns the Medical Service of the Army consisted of either commissioned Surgeon and enlisted Hospital Stewards with the troops or Contract Surgeons in the more civilized posts. There were no other enlisted men in the medical service and cooks and ward attendants were furnished by roster of the line companies, just like any other fatigue detail. Going to the hospital was not popular and was resisted by regular soldiers as it is to this day.

Medical Department Established

In 1887 a Hospital Corps was finally established and soldiers could be enlisted directly in the Medical Department.

The Spanish War was short and far from brilliant from a staff and supply standpoint. There were less than 2,000 wounded in the whole war. The medical personnel, as were all the rest of the augmentary troops, were National Guard or Volunteers. They did the best they could with what they had but they had little. The principal cause of disability were the enteric diseases with Malaria a close second. The principal usefulness of this war was to point up the shortcomings of the military organization and lead to a general revision of our staff departments and a complete overhaul of our school systems under the leadership of Elihu Root as Secretary of War. It should also be noted that the Chief of Staff of the Army under President Theodore Roosevelt was General Leonard Wood, a physician who had graduated from Harvard Medical School and had served as a Medical Officer of the Regular Army for many years, winning the Congressional Medal of Honor for services against hostile Indians.

At the outbreak of the Spanish War he had transferred to the Cavalry as a full colonel and commanded the regiment of which Theodore Roosevelt was Lieutenant Colonel.

In this interim period between the Spanish War and World War I, it is interesting to note that civilian physicians decided that war was here to stay and began to plan how best they could serve their country in time of war. This led, in 1909, to the establishment of the Medical Reserve Corps which, in 1912, got the Medical Field Service and Correspondence School started as a part of the Staff School at Fort Leavenworth where it remained until transferred to Carlisle Barracks at the end of the first World War.

With the outbreak of World War I there were well established plans for the enlargement of the Medical Department. Types of hospitals had been established and the number of personnel necessary to staff them had been determined. In this war it became necessary for the first time in our history to draft men to be soldiers. However, the Officer Corps and especially the Medical Department was completely volunteer, many of whom had participated in some military training or indoctrination before putting on the uniform.

The number of men involved in this war was quite large but the principals of organization were sound. The difficulties arose from shortage of supplies, lack of coordination of shipments and the habit of Medical Officers of crying "Red Tape" when in truth they were simply ignorant of any administration.

After this war and before World War II, there was still considerable interest by civilian physicians in things military and many leaders of the civilian medical profession were advisors to the Surgeon General. The vacancies in National Guard and Reserve Units were usually quickly filled. There were many more applicants for the Regular Army than the Regular Army could take. Institutional interest was kept up by "Affiliated Units" in which all positions were filled by the staff of a particular hospital or university.

We had a good year to mobilize before we actually had to start shooting in that war and were in fair shape when Pearl Harbor was bombed. Many of you served in that war and in its little indefinite brother in Korea and I am not going to talk about it.

What About the Future

This leads us to an inquiry as to: What will the war of the future be like?

There are two schools of thought. One extreme is the "perhaps it won't be Atomic" and the other the Air Force concept of, "bang, you're dead in 30 days."

There may, of course, be little wars in which the participants can get just as dead as they can in an

atomic war of major proportions. Also, in these so-called "Brush Fire Wars" it is generally agreed that atomic weapons of some size will be used.

This leads us into the organization of the Army for the war of the future. Whether this war be small and deadly or large and deadly, the Army has adopted a new type of division called the "Pentomic Division" in which the three infantry regiments of the World War II division are replaced by five organizations of combined arms called "Battle Groups." These fight in widely dispersed formations in which being surrounded is a normal battle formation and where there is no longer a battle line but only a "battle area." These battle groups have a rather larger medical capability than the old infantry regiment and the division has a small medical battalion with a stout clearing company but in general, it is felt that medical service will be like that of an airborne unit in an air head where most of the casualties will have to be flown out. It is expected that this will be done by the new long range helicopters coming into use and that these will bring supplies and take out patients on the back haul.

Where Choppers Take the Wounded

Where do they take these patients? Either to an air strip where the patients can be transshipped to fixed wing aircraft or direct to General Hospitals in the Army Zone.

The types of non-divisional medical units that are planned are two. First, a field hospital of three platoons each being capable of operating as an independent 100-bed unit or as a combined group, and the General Hospital of 1,000 beds. It is felt that these two types can give the flexibility necessary in medical operations. A platoon can be detached for support of any type of effort whether forward or to the rear, and the general hospitals can be organized in hospital centers and designated as specialized hospitals with a minimum of organizational change.

There is a change in concept of the treatment of wounded. We know that once a man has passed to the rear of the division and is no longer cared for by people who wear the same shoulder patch or totem he becomes a hero and is resistant to return to the combat area. Therefore, in the widely dispersed battle field the wounded man will be kept as far forward as possible and may even be returned to his unit to convalesce.

Now, suppose the war starts as a big war with a coordinated thermo-nuclear attack against a number of United States Cities. I somehow feel that there will be all of the mistakes made that can possibly be made by both sides and the result will not be what the Operations Staff on either side had planned.

If It Should Hit Topeka

Let's take Topeka as an example and postulate that it is a prime target in the Russian target folders. I can believe that the Russian gunner might have had a hard night the night before and is a fraction of a mil off in setting his sights and the bomb misses Topeka entirely and hits Bazine, Kansas, squarely on the nose. We hope no one has dear friends in Bazine. Then one of the rockets satellited around Forbes Air Force Base rears up to counter-attack Moscow but it malfunctions and falls to the ground on take-off.

Looks like zero to zero at the end of the first inning as far as Topeka is concerned. But this is a sneaky type of war and let's redevelop a situation which occurred in the Marshall Islands when a bomb gave an unexpectedly large bang.

Omaha got socked with its bomb, right on the nose. What happens to its atomic cloud? It drifts down the prevailing winds and about half an hour later is spilling fallout about 200 miles away.

So perhaps, even with our first good luck we should have given some thought to what will happen to us here in town in case the United States is attacked.

First, there are going to be an ungodly number of people dead right now. So many that you can't compare it to any catastrophe you know. But these people are dead and there is nothing the medical profession can do for them. The civil authorities will have to bury them as rapidly as they can and how they can.

Secondly, what is going to be the mental attitude of the survivors? In this hot bed of head candlers I am not going to discuss this question.

Third, there are going to be an enormous amount of wounded of all types. Of these, radiation casualties will initially be a small percentage. The immediate problem will be burns, fractures, blast, crush, and lacerations. Much of these would be after a large non atomic disaster. The radiation casualties will show up later.

What are you physicians going to do? In the first place, you will probably all be drafted into the Public Service by the city or the state to provide what service you can. Without an organization you are not going to be effective. In fact, you will be most ineffective. This has been foreseen and there is in existence a Civil Defense Service. In Kansas, this organization has prepared an excellent plan called: Preliminary Operational Survival Plan; and the part that interests you is: Annex N, "Health Services" dated November 1957.

This plan establishes the structure of medical and other types of relief units. There is only one thing I can find wrong with it and that is that no one has joined as a volunteer reservist.

Don't forget that to have an efficient hospital you must have cooks, truck drivers, orderlies. The physi-

cians by themselves can do little. You must have an organization.

What then should the individual physician do now on the second day of November 1959? He should either join one of the reserve components of the Armed Services and budget some time to it as he does to church or service organizations, or he should find his place in the Civil Defense setup and budget some time to it. By belonging to the Civil Defense you may be able effectively to help your neighbor in some other community in case of civil disaster.

In addition to all these, in fact above all these, I urge you to take a brisk interest in the Foreign Policy of the United States and in the staffing and funding of the Department of State of the United States, for here is really the first line of defense. If they are superior in caliber of personnel and function as a foreign office should, you should have no reason to treat atomic casualties. Especially if State is backed by a reserve of the military large enough to stop any resort to force on the part of the opposition.

Medical Department
Fort Leavenworth
Leavenworth, Kansas

Medical History of War Offered

Many of the medical lessons learned during World War I had to be relearned under fire during World War II because of paucity of distribution of the World War I medical history.

Lieutenant General Leonard D. Heaton, The Army Surgeon General in an endeavor to prevent this costly relearning process, in the unhappy event of another war, has directed the preparation, publication, and distribution of the "History of the Medical Department, United States Army, in World War II." General Heaton is particularly anxious that information of the existence and availability of this History be circulated widely among the profession, both military and civilian.

Of the 48 volumes programmed for the series, 15 have been published and can be purchased at modest cost from The Superintendent of Documents, Government Printing Office, Washington 25, D. C. The set of 15 volumes may be purchased for $66.50 or individual volumes can be obtained at remarkably low prices. Commanding officers of medical units may requisition copies for their Medical Units libraries by submitting DA Form 17 directly to The Historical Unit, U. S. Army Medical Service, Washington 12, D. C., ATTN: Promotion Branch.

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Dioctyl Sodium Sulfosuccinate

Serum Lipid and Protein Levels During Its Use for Constipation

SAMUEL ZELMAN, M.D.; CHI CHE WANG, Ph.D.; *and* I. APPELHANZ, B.S., *Topeka*

Because intravenous detergents have been shown experimentally to cause rises in serum lipids and lipoproteins, the oral use of dioctyl sodium sulfosuccinate, commonly used in the treatment of constipation, was followed in 49 patients by serum lipid and protein studies. Though small mean differences in the expected directions were obtained after treatment, these were statistically insignificant.

It is concluded that oral administration of therapeutic doses of dioctyl sodium sulfosuccinate for constipation does not significantly affect serum lipid or protein levels.

SINCE ITS INTRODUCTION IN 1955 by Wilson and Dickinson,[1] the oral administration of a detergent agent to cause fecal softening has become widespread practice, both in and out of hospitals. The surface acting agent most commonly used, dioctyl sodium sulfosuccinate, is presumably not absorbed and not toxic. The possibility remains, however, that small quantities of that agent may be absorbed into the bloodstream and there produce some of the effects which have been reported following experimental injection of such agents.

Elevations of blood cholesterol, phospholipids, and neutral fat have followed intravenous injection of detergent substances into rabbits,[2] rats,[3] and mice.[4] These rises in plasma lipids have been sustained and cumulative when repeated injections or long-acting agents were used.[2] The detergent action of accumulated bile acids in blood has been held accountable for the increased serum lipid levels found clinically in patients with biliary obstruction.[5] An increased formation of lipoprotein complexes in the serum is associated with these higher blood lipid levels,[6] interfering with the normal exchange of lipids between plasma and liver.[7]

Experimental oral administration of detergent in mice was reported to be ineffective in producing a detectable level of detergent in the blood or in increasing the blood lipids.[4] Nevertheless, in view of the present widespread clinical use of oral detergent, it seemed advisable to investigate the possibility of serum lipid changes in patients receiving such medication.

Method

Forty-six hospitalized patients, most of whom required the use of some aid to bowel movement, were given dioctyl sodium sulfosuccinate in a divided daily dose of 360 mg. for a period of one week. Serum lipid and protein determinations were made in duplicate on each patient immediately before beginning treatment and again after one week before discontinuing its use. The serum total lipids were determined by the turbidimetric technique of Kunkel.[8] The serum cholesterol and its esterified fraction were determined according to the method of Zak, *et al.*[9] The serum phospholipids were determined by a modification of the Youngburg technique,[10] using Gomori's method for the determination of inorganic phosphorus.[11] The total proteins of the serum were determined by the micro-Kjeldahl method detailed by Koch and McMeekin,[12] modified by diluting the serum 1:50 and titrating the distillate against 0.01 N acid instead of Nesslerization. The serum proteins were fractionated by paper electrophoresis according to the procedure described by Durrum,[13] using the Spinco model R paper electrophoresis cell and photoelectric scanner.

Three patients were given the same daily dose of dioctyl sodium sulfosuccinate for a consecutive period of 12 weeks, before and during which time the serum total lipid, total and esterified cholesterol, phospholipid, and the serum protein paper electrophoretic curve were determined weekly.

From the Medical Service and Research Laboratory, Veterans Administration Hospital, Topeka, Kansas.

TABLE 1

SERUM LIPIDS AND PROTEINS BEFORE AND AFTER ONE WEEK OF DIOCTYL SODIUM SULFOSUCCINATE 360 MG. DAILY

	Mean Values			*Total*	*Significance*	
	BEFORE	AFTER	DIFF.	*Cases*	t	PROB.
Total Lipids mg. %	792.4	804.0	11.6	41	0.67	.50-.60
Phospholipids mg. %	233.9	240.8	6.9	41	0.81	.40-.50
Total Cholesterol mg. %	235.4	241.0	5.6	36	0.66	.50-.60
% Esterified	66.4	65.7	−0.7	41	−0.48	.60-.70
Total Proteins Gm. %	6.86	6.68	−0.18	45	−1.68	.05-.10
% Albumin	45.5	46.0	0.4*	45	0.55	.50-.60
% Alpha-1 Globulin	5.0	5.2	0.3*	45	0.99	.30-.40
% Alpha-2 Globulin	12.5	12.9	0.3*	45	0.87	.30-.40
% Beta Globulin	16.0	16.2	0.2	45	0.50	.60-.70
% Gamma Globulin	21.0	19.7	−1.3	45	−0.31	.70-.80

* slight discrepancy due to rounding of terminal digits

Results

The mean values of serum total lipids, phospholipids, and total cholesterol were higher after treatment than before, and the mean serum alpha and beta globulin fractions were increased at the expense of the gamma globulin fraction. These changes were all in the direction to be expected if affected by detergent in the serum. However, the differences were small, and statistically insignificant *(Table 1)*.

The three patients followed over a period of 12 weeks also failed to show significant changes as a result of treatment.

References

1. Wilson, J. L. and Dickinson, D. G. Use of dioctyl sodium sulfosuccinate (aerosol O. T.) for severe constipation. J.A.M.A. 158:261, 1955.

2. Kellner, A., Correll, J. W., and Ladd, A. T. Sustained hyperlipemia induced in rabbits by means of intravenously injected surface-active agents. J. Exp. Med. 93:-373, 1951.

3. Friedman, M. and Byers, S. O. The mechanism responsible for the hypercholesteremia induced by Triton WR1339. J. Exp. Med. 97:117, 1953.

4. Cornforth, J. W., Hart, P. D'A., Rees, R. J. W., and Stock, J. A. Antituberculous effect of certain surface-active polyoxyethylene ethers in mice. Nature 168:150, 1951.

5. Friedman, M. and Byers, S. O. Interrelationship of plasma cholate and phospholipid concentrations and their resultant effect on plasma cholesterol in biliary obstruction. Am. J. Physiol. 188:337, 1957.

6. Byers, S. O., Friedman, M., Biggs, M. W., and Gunning, B. Observations concerning the production and excretion of cholesterol in mammals. IX. The mechanism of the hypercholesteremic effect of cholic acid. J. Exp. Med. 97:511, 1953.

7. Hirsch, R. L. and Kellner, A. The pathogenesis of hyperlipemia induced by means of surface-active agents. II. Failure of exchange of cholesterol between the plasma and the liver in rabbits given Triton WR1339. J. Exp. Med. 104:15, 1956.

8. Kunkel, H. G., Ahrens, E. H., Jr., and Eisenmenger, W. J. Application of turbidimetric methods for estimation of gamma globulin and total lipid to the study of patients with liver disease. Gastroenterology 11:499, 1948.

9. Zak, B., Dickerman, R. C., White, E. G., Burnett, H., and Cherney, P. J. Rapid estimation of free and total cholesterol. Am. J. Clin. Path. 24:1307, 1954.

10. Youngburg, G. E. and Youngburg, M. V. Phosphorus metabolism: system of blood phosphorus analysis. J. Lab. & Clin. Med. 16:158, 1930.

11. Gomori, G. Modification of colorimetric phosphorus determination for use with photoelectric colorimeter. J. Lab. & Clin. Med. 27:955, 1942.

12. Koch, F. C. and McMeekin, T. L. A new direct Nesslerization micro-Kjeldahl method and a modification of the Nessler-Folin reagent for ammonia. J. Am. Chem. Soc. 46:2066, 1924.

13. Durrum, E. L. A microelectrophoretic and microionophoretic technique. J. Am. Chem. Soc. 72:2943, 1950.

Tumor CONFERENCE

Liposarcoma of Thigh

Edited by JOHN D. WARKENTIN, M.D.

Dr. Boley (Moderator): The case for presentation illustrates the unexpected occurrence of malignancy in a tumor which pre-operatively was considered to be benign.

Mr. Barnett, will you please tell us this patient's story?

Mr. Barnett: The patient is a 55-year-old, obese, white woman. She was first seen in the out-patient clinic three weeks ago complaining of a small, firm, painful lump on the medial aspect of her left thigh which was tender when the opposite thigh rubbed against it. She had first noticed this lump only on the previous day. In addition, about two months earlier she had first noticed small, soft, non-tender subcutaneous lumps in her back. These had apparently not increased in size. She had consulted her physician about them and was told that they were lipomas and that she should not worry about them. The remainder of the history was noncontributory.

The patient was five feet tall and weighed 180 pounds. This obesity made adequate palpation of the subcutaneous masses and the inguinal lymph nodes difficult. The subcutaneous lumps in her back were soft, indefinite in outline and nontender. Two were palpable on the left along the posterior axillary line, and one on the right. The largest measured about 15 centimeters in diameter. The lump in the thigh was also subcutaneous. It did not elevate the overlying skin, which was freely movable over it. It formed a definite, smooth, rounded mass, however, which was firm, slightly tender and variably painful; the overlying skin was not hot. The tumor measured about three cm. in diameter. No inguinal lymph nodes could be palpated. The remainder of the physical examination, apart from the obesity, was within normal limits. There were no xanthomas of the skin, and there was no evidence of neural involvement by any of these subcutaneous masses.

Dr. Boley: Then how do you account for the pain that this patient complained of?

Dr. Dressler: I have no good explanation for it. I doubt that the lump was really painful and believe that what she was describing was probably the tenderness she felt when the opposite thigh rubbed against the mass.

A Student: What is the cause of the pain in lipoma dolorosa?

Dr. Boley: The cause of the pain in this condition remains unknown. These lipomas do not have any demonstrable relationship to nerves which could be incriminated as the cause of the pain. Multiple painful lipomas must be differentiated from adiposis dolorosa or Dercum's disease, which is characterized by painful, but non-neoplastic, deposition of symmetrical masses of fat in various parts. Dr. Dressler, what was your impression of the thigh tumor when you first saw the patient?

Dr. Dressler: The difficulty in evaluating this tumor because of the patient's obesity has already been mentioned. We thought that this lump was a simple lipoma in spite of its moderate firmness. We excised the mass in the out-patient department. It did not appear encapsulated, and we could see no septation or trabeculae.

Dr. Boley: The gross specimen we received in the laboratory was a roughly rectangular piece of yellow adipose tissure measuring 3 x 2 x 1.5 cm. When we cut through it we found a central stellate, firmer, grayish-white area. Microscopically, with a low-power lens, one sees a mass of adipose tissue traversed by radiating, more cellular fibrous septa which are larger and more prominent in the central portion *(Figure 1)*. The septa become much more narrow and fine near the periphery of the mass.

A number of lesions have this general appearance when viewed under low magnification. Weber-Chris-

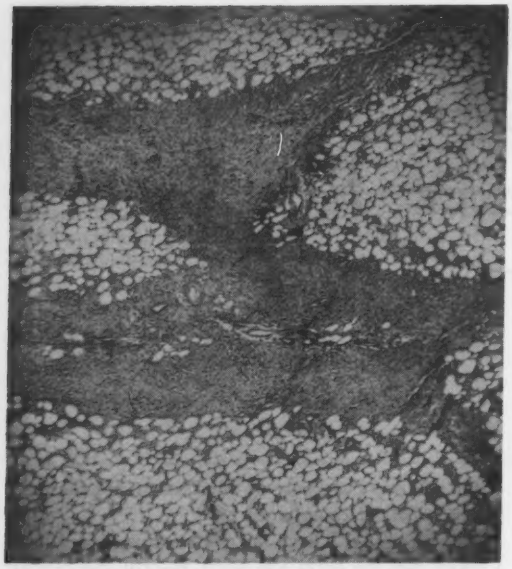

Figure 1. Radiating, cellular, fibrous septa embedded in a mass of adipose tissue. Hematoxylin and eosin. ×20.

tian disease or relapsing, febrile, nodular, non-suppurative panniculitis is characterized by firm, tender nodules and may have this low-power histologic appearance; however, the nodules are multiple, and under the high power there are large, prominent, histiocytic foam-cells and, in the early stage, many inflammatory cells. Erythema nodosum involves predominantly the fibrous septa in the subcutaneous tissue and so may also have this general pattern. It consists of a chronic granulomatous inflammation accompanied by a variable vasculitis. It, too, forms multiple red nodules, most commonly on the shins. Erythema induratum might also be considered, but this lesion is more commonly found in the lower legs, lies immediately beneath the dermis and has a much more dense inflammatory infiltrate with areas of caseation.

On examining the present lesion under higher magnification, we can rule out all of these conditions. The septa contain numerous spindle-shaped cells lying in a haphazard arrangement. In addition, there are cells with large, hyperchromatic, smudgy nuclei, and some multinucleated cells *(Figure 2)*. Some of these cells have foamy or vacuolated cytoplasm suggesting that they are lipoblasts. They intermingle with a few inflammatory cells and infiltrate outward from the septa into the adjacent adipose tissue. Occasional cells are in mitosis. The histologic appearance is one of patternless proliferation, and not a reaction to injury. These features have led us to the diagnosis of liposarcoma.

Dr. Kepes: Dr. Boley, do you believe that the large fat cells have been formed by the liposarcoma or were they pre-existent? In other words, might this mass originally have been a lipoma, the center of which has undergone a malignant change?

Dr. Boley: Yes, I believe this tumor originally was a lipoma and that the large fat cells are not the product of the malignant tumor. Grossly, this tumor was not uniformily bright yellow as lipomas usually are, but had a whitish appearance which has been called lipoma myxomatoides by Ewing. Whenever a supposed lipoma has this whitish, opaque, edematous appearance, one should think of low-grade liposarcoma. Sometimes this gross appearance is due to an increase in fibrous tissue and vascularity in a benign lipoma, but when mitoses and these large, hyperchromatic, smudgy nuclei are seen microscopically, liposarcoma becomes a strong probability.

A Student: Is there any increased incidence of lipomas and liposarcomas in obese patients?

Dr. Boley: I don't know.

A Student: How likely is this patient to have

(Continued on page 615)

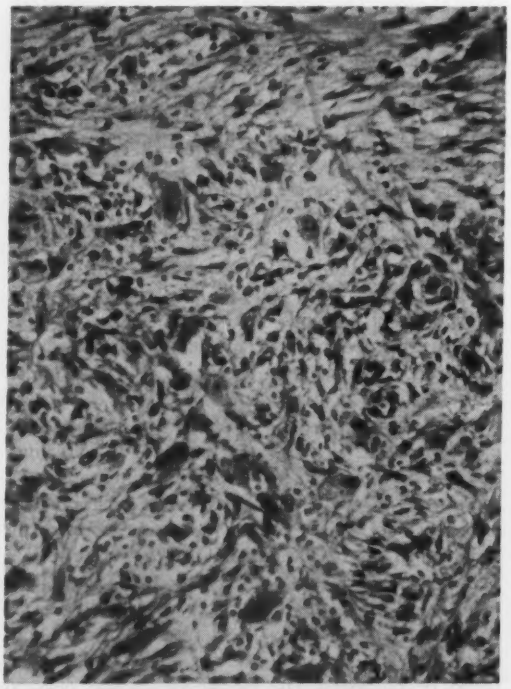

Figure 2. The septa contain patternless fusiform cells and large, sometimes vacuolated cells with dark-staining, irregular, smudgy nuclei. A few inflammatory cells are diffusely interspersed. Hematoxylin and eosin. ×250.

Student
THESIS

The Hippocratic Oath; Its Background, Origins and Partial History

SANDRA KELLER DAUGHERTY, M.D., ***Houston***

Introduction

". . . UNTIL THERE ROSE AMONG them Hippocrates, the son of Heraclides, who is known as Hippocrates the Great, of widespread name and famous for his excellence."* It matters little whether Hippocrates composed all of the works that have been recorded in his name, or indeed whether the *Oath,* which bears his name and is the subject of this paper, was by his authorship. What is important is that there existed and continues to exist to this day a concept known as "Hippocratic Medicine," the spirit of which is caught up and embodied within the words of the *Hippocratic Oath.*

According to Ibn Jamī, prior to the time of Hippocrates, the art of medicine was on the decline, for the Asclepiads kept their art within the confines of their families, and they had too few heirs to keep the art alive. When Hippocrates realized this, he decided to open the doors of medicine to promising young men of good character, so that the art would thrive and its practices be spread over the civilized earth.

"As he felt, however, that he would be guilty of a crime and liable to slander by deviating from the hereditary principle and by transferring the art (of

HIPPOCRATIC OATH

I swear by Apollo the physician, by Aesculapius, Hygeia, and Panacea, and I take to witness all the gods, all the goddesses, to keep according to my ability and my judgment the following Oath:

To consider dear to me as my parents him who taught me this art; to live in common with him and if necessary to share my goods with him; to look upon his children as my own brothers, to teach them this art if they so desire without fee or written promise; to impart to my sons and the sons of the master who taught me and the disciples who have enrolled themselves and have agreed to the rules of the profession, but to these alone, the precepts and the instruction.

I will prescribe regimen for the good of my patients according to my ability and my judgment and never do harm to anyone. To please no one will I prescribe a deadly drug, nor give advice which may cause his death. Nor will I give a woman a pessary to procure abortion. But I will preserve the purity of my life and my art.

I will not cut for stone, even for patients in whom the disease is manifest; I will leave this operation to be performed by practitioners (specialists in this art).

In every house where I come I will enter only for the good of my patients, keeping myself far from all intentional ill-doing and all seduction, and especially from the pleasures of love with women or with men, be they free or slaves.

All that may come to my knowledge in the exercise of my profession or outside of my profession or in daily commerce with men, which ought not to be spread abroad, I will keep secret and will never reveal. If I keep this oath faithfully, may I enjoy my life and practice my art, respected by all men and in all times; but if I swerve from it or violate it, may the reverse be my lot.

This is one of a group of theses written by fourth year students at the University or Kansas School of Medicine, selected for publication by the Editorial Board from a group judged to be best by the faculty at the school. Dr. Daugherty is now at the Jefferson Davis Hospital in Houston, Texas.

* These simple words are taken from Max Meyerhoff's English translation of the Arabic treatise by Ibn Jamī, "An epistle to Saladin on the Revival of the Art of Healing." Sultan Saladin reigned over Egypt and Syria from 1171 to 1193 A.D. Ibn Jamī was one of the most prominent physicians of his court.

medicine) to public teaching, he endeavored to substitute teachers for the fathers, disciples for the sons, and the art itself for the kinship between them, and he imposed on the students an oath to ensure that the professional connection between teacher and student should correspond to the original connection of kinship and heritage."

In order to understand the *Hippocratic Oath* and its origins, we must first learn something of the philosophy of Ancient Greek Medicine and of the era in which Hippocrates lived. Little is known of the life of Hippocrates. He lived during the 5th and 6th centuries B.C. The history of the origin of the *Oath* that Ibn Jamī gives us, as quoted above, was written 1500 years after Hippocrates lived, and it is not presented here as fact. Although the same history is repeated often by other Arabian historians, it most probably is merely a popular "folk" story.

What Is Fact and Fancy?

It is difficult to separate fact from myth about Hippocrates. It is known that he was a disciple of the Coan school of medicine, as opposed to its contemporary rival, the school at Cnidus. According to Major, Hippocrates, living in the Golden Age of Greece, had as his contemporaries, "Pericles, the statesman; the philosophers, Socrates, Plato, Aristotle, Xenophon, and Protagoras; the dramatists Aeschylus, Sophocles, Euripides, and Aristophanes; the poet Pindar; the historians Herodotus and Thucydides; the sculptors Phidias, Praxiteles and Polygnotus." Much that is attributed to him is contradictory, but this in no way detracts from his legendary greatness. His work and philosophy were well known and respected for their excellence by his learned contemporaries, and he was regarded by them as the greatest authority of the age.

That so many varied interpretations of his work and philosophy were developed by his contemporaries and by succeeding generations is attributed by Heidel to the fact that Hippocrates, like Jesus, influenced men through his oral teachings, which were ". . . ethical and religious and capable of varying interpretations." Even if we allow that all of his teachings were in oral form only and he never recorded a single view by his own hand, certainly the literature of his day reflected his great mind. Again, quoting from Heidel:

"If we cannot identify a single extant treatise in the Hippocratic corpus as certainly written by Hippocrates, we cannot with certainty attribute any one of them to any other author, and concerning the writers from whose works well-authenticated extracts have been preserved, it is fair to say that, except for those who stand close to Aristotle, differences between their distinctive doctrines were trivial in comparison with the points of view common to all. Littré was clearly right in asserting that the more closely one studies the Hippocratic treatises the more one recognizes that they all present a level of knowledge almost the same and conceptions of the living body and its diseases very much alike."

The Hippocratics were a deeply moralistic group. They not only listened carefully to their patients' complaints and developed definite pictures of disease from their stories, but were bound to treat their patients in all sincerity and to the best of their ability. They were the farthest opposite to Charlatans that the world has known. Intellectually, they belonged to the greatest minds of 5th century Greek society. Edelstein believes that the development of Greek philosophy had a profound influence upon Greek medicine. The use of medical examples and references to the human body served as a vehicle for the education of the public in the concepts of philosophy, for much of medical knowledge was common knowledge to the public, and therefore it was convenient for philosophers to use medical analogies. This is not to say that all physicians were merely craftsmen and possessed knowledge to which the public had easy access, but there were a few "ingenious and subtle" physicians who were philosophers first and physicians only because of their interest in the physiology and biology of man as a part of the great system of nature. In order to know man, one must first comprehend the laws of nature.

Thus far, this paper has been concerned with the philosophical background of Hippocratic medicine. The practical aspects and methods, and finally Hippocratic ethics as exemplified in the Hippocratic Oath remain to be discussed. These three categories, Hippocratic philosophy, methods and ethics are artificial, for the latter two must arise from the first. Only a word need be said about Hippocratic Methods in this paper.

The Methods

The age of Hippocrates was one of unparalled inquisitiveness into the nature of things, of investigation of opposites and determining why they were opposed. Although the Greeks generalized and hypothesized, necessarily generalizing as they went due to their lack of fundamental data obtainable only through experimentation, they were, in many ways, astute observers of phenomena. One of their main medical premises was to know each patient well, for they recognized that individual variation had an effect upon the progress of disease in each patient. They knew the outcome of various diseases because of careful observation and thought the rendering of prognosis an important task of the physician. This was part of the "art" of the practising physician. The art and

science of medicine were interdependent; the first was as important as the second, and if one were forsaken for the other, he was regarded as a narrow and inferior physician. The Hippocratics stressed the importance of the prophylaxis of disease by maintaining health with proper diet, exercise, etc. A disturbed balance of the body resulted in disease; therefore, to restore balance was to cure disease. They believed that disease was caused by an overbalance of a constituent, seldom to a paucity of one. The Hippocratic method of diagnosis was the following:

". . . Hippocrates, in making a diagnosis, took the patient's history, inquired carefully about his present illness, his past history, his family history, his habits, his work, where he lived, what he ate and drank, and then made a careful physical examination, employing inspection, palpation, and auscultation, following this with a careful examination of sputum, urine and stools."

Because physicians required that their patients put themselves entirely into their hands, forcing them to follow their prescribed diet and physical regimen, only the rich could afford to abandon their normal life activities and become preoccupied with their bodily functions and malfunctions. "Desiring health as they did, unhampered by any professional obligation, uninterested in being busy for the sake of being busy, the upper classes were free to live for their health, to indulge in the idolatry of the body endorsed by the physicians."

The Oath and Its Origins

"The ethics of the Classical period of Greek medicine were not the ethics of humanism as we know them, or indeed of the humanism which was present in Greek ethics only a few centuries later." The Greek physician felt that it was his duty to practice medicine well, and to give his patient the best diagnostic and therapeutic measures, not out of love for his fellow man, or "philanthropy," but because he felt it his duty to perform as close to perfect work as was humanly possible. It was not moral conscience that forbade him to practice poor medicine, but "the conscience of a good craftsman" which prevented him from corrupting the skill of his profession. There were no laws of malpractice. A physician could have practiced all manner of abuses and gone unpunished, were it not for this professional conscience. "His ethic consists in doing his task well, in perfecting his skill; it is an ethic of outward achievement rather than of inner intention." Morality had nothing to do with medicine. But a great change was to take place within the next few centuries. A movement which Edelstein believes began in the latter part of the 4th century, B.C., the time when the Hippocratic Oath was composed, and extended down to the time of Galen, was to add to the conscience of the perfecting and impersonal craftsman the moral attitudes of the humanist. "Through (this movement), the ethics of the medical craftsman were reshaped in accordance with the various systems of philosophy. The new standards characteristic of the second stage in the development of ancient medical ethics originated in a revaluation of the arts and crafts, and in the transformation of the medical craft into a scientific pursuit." The Pythagoreans, who composed a minority group, held moralistic attitudes toward their work, and indeed toward every aspect of their lives. Their greatly sought-after "good life" could be attained only through the application of moral law to all aspects of life. The evolution of humanism, if we begin with the Pythagoreans, extended down to the 2nd century A.D. when it was formulated ito the philosophy of late Stoicism, which ". . . in its new terms of human brotherhood, . . . foreshadow(ed) the categories of Christian medical ethics." During these five centuries of humanistic development and existence, only a minority of physicians adhered to and practiced the philosophy, for no medical institution taught its precepts and no law enforced its moralistic practices. As Edelstein states ". . . this very fact makes the achievement of the individuals who aspired to medical ethics all the more impressive . . . that they were willing to forego material advantage for the law of their own conscience; that they took the initiative in raising and clarifying the moral issue, thereby laying the foundation for all later medical ethics." It is only in the understanding of this movement, that the precepts as outlined in the *Oath* can be fully appreciated.

Two Sections of the Oath

It has long been known that the Hippocratic Oath contains two distinct sections; the first part, known as the covenant, is concerned with "the pupil's duties towards his teacher and his teacher's family and of the pupil's obligations in transmitting medical knowledge"; the second part is the "ethical code" and concerns the rules to be observed in the treatment of diseases. The ethical code includes the two clauses which forbid poisoning and abortion. Edelstein, in his paper on the *Oath,* believes that these are the basic beliefs (those against poisoning and abortion) underlying the whole program outlined in the Oath, and that by tracing these, the historical identification of the Oath's ethical precepts may be made.

The ethics of antiquity did not forbid suicide or abortion; quite to the contrary, it condoned both if the circumstances were suitable. Physicians felt justi-

Most of the information in this paper on the ethics of Hippocratic medicine and the origins of the *Oath* is taken from publications by Ludwig Edelstein.

fied in advising suicide to their patients if they were plagued by intolerable pains and certain incurable diseases. Since the physician had the greatest knowledge of poisonous medications and knew which were the surest and least painful, it was natural that he should dispense the potion also. Suicide was actually legalized in some states if it could be shown that there was sufficient reason. Similarly, abortion was not censured, and infant exposure was often practiced. It is obvious then that although the *Oath* forbade these acts, not all physicians complied, for it was not considered to be a breach of medical ethics to take part in such activity. Thus far we have evidence that the law did not forbid abortion or suicide; what then, did religion advise? Since the religion of antiquity "did not include the dogma of an immortal soul," and there is no mention of punishment by their gods for such acts, it must be assumed that religion did not forbid abortion and suicide. Therefore, "law and religion left the physician free to do whatever seemed best to him."

If law and religion are not responsible for developing these ethical concepts, then all that is left is that they are the result of a definite philosophical system. This could not have originated with the Cynics or the Stoics, for they held that suicide was permissible for the diseased. Although Aristotle claimed that suicide was cowardly, and Epicurus felt that man was too noble to be subdued and beaten by mere illness, these were mere words and too weak an influence to have brought about such a definite statement against the commission of these acts as found in the Oath. And, besides, there was no threat of punishment implied in these philosophies when a follower disobeyed. Dr. Edelstein feels that these ethical concepts were Pythagorean in origin.

Pythagorean Influence

The Pythagoreans were a minority group of the 4th century B.C., and they held life a most precious possession. Suicide was considered despicable for it was "a sin against god who had allocated to man his position in life as a post to be held and to be defended." Certainly, such a philosophy could not condone abortion either. They held that it was man's duty to have children so that on death he would leave other worshipers of the gods to take his place. Unlike the Platonists and Stoics who believed that life did not begin until the moment of birth and consequently that abortion did not kill a living being, the Pythagoreans claimed that the life of the embryo began at the moment of conception. The penalty for committing such sins against the gods was severe and might even result in the loss of the offender's soul.

"When the physician, after having foresworn ever to give poison[4] or abortive remedies, add(ed) 'In purity and holiness I will guard my life and my art' it (surely must have been) the purity and holiness of the 'Pythagorean way of life' to which he dedicated himself."

Thus far in discussing the ethical aspects of the *Oath,* we have been concerned with the specific prohibitions of abortion and suicide. The general rules of the ethical code, as Edelstein labels them, remain to be discussed. These are contained in that section of the *Oath* which deals with the ethics to be practiced when treating disease proper. Disease was treated by the judicious use of dietetics, pharmacology, and surgery. It is most interesting to note that the Pythagorean physicians placed the emphasis of treatment upon dietetics first, pharmacology second, and surgery last of all, just as they are listed in the *Oath.* In the statement, "I will apply dietetic measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice," Edelstein feels that the harm and injustice mentioned here is that which might result from the injury man inflicts upon himself. The Pythagoreans felt that all bodily appetites were characteristic of the soul, but were either created or acquired by man and so were to be guarded carefully, lest man overindulge in them. It is necessary therefore, in order not to overindulge and keep oneself "from harm and injustice," to choose one's foods and their quantity with caution and intelligence. It was their belief that the doctor was the person most qualified to make this choice. There is an element of preventive medicine here, for by not only prescribing a diet in disease, the physician must also prevent disease by seeing to it that the patient had a properly chosen diet in health. To give in to excessive appetite, was to create disease in the soul, as well as produce it in the body. In the Pythagorean sense, the physician ministered to both the soul and the body.

The pharmacological aspects of Pythagorean medicine have already been discussed under the section on abortion and suicide.

"I will not use the knife, not even on sufferers from stone, but will withdraw in favor of such men as are engaged in this work." The Pythagoreans valued surgeons less highly than did other physicians of their day; they felt that surgery was the lowest of the branches of medicine. This is in accord with their teachings and beliefs, as they felt that most diseases resulted from unreasonable living and therefore, were amenable to therapy by diet and medication, not through surgery. Surgery did not correct but ignored the cause of disease, for the removal of a part did not cure that part. They did allow others to perform surgery on their patients—this would seem a paradox. The Pythagoreans did not believe in a universal adoption of their philosophy by all people, for their dogma was suited to the higher functioning individ-

uals. They could still remain pure while referring their patients to the impure and "lower functioning" surgeons. They realized that surgery was of use in those cases where it had become too late to cure by the methods of dietetics and pharmacology. Why they would not perform the surgery themselves remains obscure.

"Whatever houses I may visit, I will come for the benefit of the sick, remaining free of all intentional injustice, of all mischief and in particular of sexual relations with both female and male persons, be they free or slaves." This unusual association of justice with sexual purity, Edelstein asserts, is again, peculiarly Pythagorean. "They alone judged sexual relations in terms of justice, meaning thereby not that which is forbidden or allowed by law: for the husband to be unfaithful to his wife was considered to be unjust toward her." In regard to whether injustice is prohibited toward both freeman and slaves, Pythagoreanism held that all men were equal and therefore deserving of equal justice.

"What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself, holding such things shameful to be spoken about." Again there is an unusual and unexpected phrase in this portion of the *Oath:* the statement that not only will he keep silent about matters which come to his attention during the course of treatment, but also those with which he comes in contact outside of treatment. In other words, these physicians were closed mouthed about all matters. Most philosophies of the day specified that the physician be silent about matters which he learned of through professional contact with his patients. It is only in Pythagoreanism that so general a statement that he be silent in all matters is found: ". . . it insists on secrecy not as a precaution, but as a duty."

Again we must be reminded that the *Hippocratic Oath* is a small voice coming to us from the 4th century B.C. It represents a minority group of that age. Quoting from Edelstein:

"Far from being the expression of the common Greek attitude towards medicine or of the natural duties of the physician, the ethical code rather reflects opinions which were peculiarly those of a small and isolated group."

The Covenant

The covenant is that portion of the *Oath* which promises the student of medicine will regard his teacher as he would his parents, in that he will supply his monetary needs if his teacher is in need; he will teach his children the art of medicine, if they wish to learn it. He also promises that he will instruct his own children in the art, but will not divulge any medical secrets to anyone who has not signed the covenant and taken the oath. The Pythagoreans of the 4th century honored their teachers by adopting them as their own fathers. Important to the Pythagorean way of life was the fact that the son honored his parents above all others, and it was his duty by law to support them. So it was the pupil's duty to support his teacher, even to the extent that "he procured burial for him" according to Pythagorean beliefs. It follows that if the teacher was to be treated as the pupil's father, then the pupil should instruct the teacher's sons and regard them as his brothers. The Pythagoreans taught medicine to an exclusive group of students, *i.e.,* those within the family as discussed above, and those few outsiders who were carefully examined and found fit to enter the profession.

The reward of the ethical physician remains to be discussed. "If I fulfill this oath and do not violate it, may it be granted to me to enjoy life and art, being honored with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot." At first glance, this seems presumptuous on the part of the physician, but when we stop to think of the Greek ideal and belief in the attainment of eternal fame on earth, it is better understood. The Pythagoreans, in keeping with their time, also believed in the attainment of worldly fame which became eternal if the person had performed celebrated and noble deeds prior to death. This peroration is no more than the expression of a desire for eternal fame, through the performance of great medical deeds.

Granted the Pythagoreans were a minority group as far as their ethics were concerned, but they practiced the highest caliber of medicine, that which we call Hippocratic medicine. They were philosophers first, and physicians second, as were the Hippocratics. That the *Oath's* Pythagorean ethics, representative at first of only a relatively small group of 4th century B.C. men, was caught up in the body of Hippocratic literature in the course of succeeding centuries and thus became known as the ethical voice of Hippocratic medicine, is proof of its endurance and exceeding applicability to medicine of all ages.

History of the *Oath*

Ibn Jamī gives the following account of how Greek medicine was transmitted to the Arabs. Again the necessary vagueness which surrounds this transmission is emphasized, for Ibn Jamī lived 1500 years after most of the Hippocratic corpus had been written.

Under Hippocrates' teachings, the medical art flourished, but later it was destroyed by petty arguments and prejudices among physicians. It became a mass of superstitious practices and quackery until

600 years had passed and Galen appeared. Galen restored Hippocratic medicine and purified it of all the falsifications the previous 600 years had introduced into it. Again the medical art flourished.

Then, Ibn Jamī states, came the Christian kings whose faith forbade the study of intellectual subjects. They discouraged the study of medicine, and once more "medical learning fell into disorder and confusion." But again, the art is revived by Oribasius, who by avoiding the length and redundance of Hippocratic and Galenic compositions, popularized medical learning, writing medical books in the form of "compendia, manuals, summaries, and the like." Students of medicine again increased in number. But the prominent physicians of Alexandria, fearing that the true healing art as exemplified by the works of Hippocrates and Galen might become extinct, prevailed upon the kings to include in the medical curriculum, 20 books, 16 of Galen and four of Hippocrates. During the 8th century, the medical school at Alexandria was transferred to Antioch and Harran, where Greek manuscripts were more abundant. Still there were many to whom the short cuts to medical education appealed, and the summaries, compendiums, etc. became more popular than the originals, and there arose the "self-taught" practitioners who knew enough about medicine merely to pull the wool over the eyes of the public by their flattering tongues and easy treatments. Ibn Jamī calls these ignorant men, Charlatans and public menaces. He appealed to Sultan Saladin for a standard to be set whereby all practitioners must be subjected to an examination.

In the 9th century A.D., Arabian medicine and philosophy was further advanced through the efforts of the Caliph Abdallah who seized Greek manuscripts from the Byzantines and brought others from Asia Minor. He also founded in Baghdad, a translation school and library where more than 300 Greek works of medicine and philosophy were translated, so that by the end of the 9th century ". . . the Arabs were in possession of all that was of interest to them of Greek science, in good Arabic translation."

Other Areas of Preserving the Greek Way

This information implies that the Arabian centers were the only areas where Greek literature and knowledge were preserved and put to practical use. This is not true. During the 6th and 7th centuries A.D., all scholarly activity was forced to confine itself within the walls of the monasteries of Europe, due to the infiltration and destruction of the barbarian intruders. Medicine was no exception. The persistance of Hippocratic medicine and idealism through the Middle Ages was largely due to the preservation and translation of manuscripts within the monasteries. This was not only true of the late Middle Ages and pre-Renaissance,[4] but was true of the early, so-called Dark Ages. The earliest known evidence of this is a letter written by St. Jerome to Nepotian, a priest in Northern Italy, in which he cautioned the priest ". . . to observe secrecy and chastity with regard to the household in which he visited the sick." In the same letter, he mentions Hippocrates and his practice of having his pupils take an oath which ". . . exacts from them silence, and prescribes for them their language, gait, dress and manners." This letter shows that there was a certain knowledge of Hippocratic ethics and etiquette during the 4th century A.D. MacKinney defends the ideals of the so-called Dark Ages, or early Middle Ages (400-1100 A.D.) as being largely Hippocratic, even though they are without the benefit of the great Salerno's influence.* During this period, two great philosophies met, those of Hippocratic and Christian idealism, and there emerged the era of "Monastic Medicine" which included the 8th through the 10th centuries A.D. This was truly a remarkable period in the history of medicine. As is popularly held, medicine with its long revered Hippocratic ethics was not subordinated to Christian ideals.

Salerno was the well-known center of Hippocratic idealism during the late Middle Ages. The manuscripts cited by MacKinney antidate the earliest examples of Salernitan literature, and he feels that the classicism of this earlier period was the result of translations made during the 5th, 6th, and 7th centuries in the monasteries of Byzantine, Italy, around Ravenna.

The medieval ideal of the physician was that he should have all the good qualities of man and no faults; he should have: ". . . discretion, taciturnity, patience, tranquillity and refinement; not greed but more of restraint and subtility, rationality, diligence, and dignity." What is more, his personality should be ". . . of a gracious and innately good character, apt and inclined to learn, sober and modest; a good conversationalist, charming, conscientious, intelligent, vigilant and affable, in all detailed affairs adept and skilful. Our art also required that one be amiable, humble and benevolent." He should not be ". . . hesitant or timid, turbulent or proud, scornful or lascivious, or garrulous, a publican, or a woman-lover, . . ." he should not be ". . . drunken or lewd, fraudulent, vulgar, criminal or disgraceful. . . ."

There is evidence that the *Oath* was taken at the beginning of the medical training: "He who wishes to begin the art of medicine and the science of nature ought to take the oath and not shrink in any way whatsoever from the consequences."

Not only were the ethics of the Hippocratic *Oath* praised as well as practiced, especially those concern-

* For much of my information on Hippocratic ethics of the Middle Ages, I rely upon Loren C. MacKinney's paper.

ing the handling of women patients, the observation of secrecy, and the giving of abortives, but Hippocratic etiquette was taught and practiced. During the early Middle Ages, the era of Monastic Medicine, ethics and etiquette apparently were kept in a fine balance with the ethical precepts carrying a little more weight. This was not true of the later Middle Ages when the "despiritualization of the medieval physician" took place. This marks the transition from Monastic to Salernitan domination during the 12th century. MacKinney states: "Apparently, it was the late, but not declining, age of Greek medicine that stressed these same factors, which had been known but neglected during the age of Monastic medicine. Suffice it to say that this type of late Classical (and also late Medieval) etiquette is distinctly secular in character." This secularism did not begin at Salerno, but was emphasized and expanded by Salernitan literature; it ". . . evolved out of earlier practices, during the late-medieval era of rapid urbanization."

Early Bedside Manner

Thus the physician was instructed to ". . . pretend that the case is serious; thus, whether he survives or dies, your reputation is safe; in the sick room greet those present and pay compliments concerning the household before turning to the patient. . . ." Moreover, ". . . The Physician himself, when he calls, should enter the room with a hilarious countenance and a joyful voice saying: 'Hey there, what do you say? What sort of fun are you having?" . . . With such words the patient is encouraged. Finally, accept your remuneration graciously, and with a full purse and with joy and delight for one and all (if that be possible), by their leave go in peace." The gentle monk-physician of the early Middle Ages, who had embraced the great ethics of the *Oath* was replaced by the politic-loving, ever cheerful physician of carefully practiced etiquette.

One such monk was St. Gregory of Nazianzus. St. Gregory was well-acquainted with Hippocratic concepts of medicine and ethics, and practiced according to them. A contemporary of St. Gregory was Caesarius, a brilliant and talented physician. Sister Mary states that his patients, many of whom were the wealthy and influential of the area, had so much confidence in him that "they did not require of him to take the oath of Hippocrates." She goes on to say: "That such an exemption was at that time unusual is obvious from the context, but precisely what significance is to be attached to the statement cannot be determined, since neither Gregory nor any other writer of antiquity makes clear who took the oath and what binding force it possessed beyond its moral sanction."

One of St. Gregory's friends was Basil, a monk-physician of kind heart and unlimited generosity. He founded a hospital outside the walls of Caesarea where the poor were tended. ". . . so numerous were the sick and the poor who came there, and so admirable were the devotion and efficiency with which they were served," that St. Gregory considered the hospital ". . . to be numbered among the wonders of the world. . . ."

Gregory had something to say about the "unprincipled" physicians of the day who threatened their patient with deserting their cases unless paid the higher fees which they demanded for more difficult or serious cases. He also alludes to the "harsh and inhumane physician, who knows only the use of the knife and cautery in his methods." Perhaps this is an indication of a little Pythagorean distrust of the surgeon.

Medical Discoveries Kept Secret

Although there is evidence that the Hippocratics did not take part in this practice, physicians from the time of antiquity did not make public their medical discoveries. This was no less true in the Middle Ages. Gregory held this as unethical, for he believed a human life so valuable as to use all his own medical knowledge plus anything else that he could borrow from others' experience, in the relief of human ills. As in antiquity, he believed that the patient must follow the advice of the physician and that it was the patient's duty to report to the physician upon becoming ill, for the body is the product of the Creator and it must be cared for as though it were a part of the divine Being. Again, a hint of Pythagorean philosophy.

A large part of the explanation for the medical centers of the Middle Ages being in connection with the monasteries was the fact that Christ and his Apostles wrought miracles of healing and were thus considered "divine physicians." Although during Gregory's day, miraculous cures were recognized as the result of prayer, still medicine was not subjected to a religious framework. Medicine was the first resort, and when medicine could offer no more, prayer was considered the only recourse.

Dietetic measures, as mentioned in the *Oath,* were one of the main methods of treatment. "When the health of a patient is being restored by abstinence from food, or by means of a proper diet, overeating or carelessness in the selection of food may bring about a relapse."

An example of the hospitals wherein monk-physicians such as Basil and St. Jerome practiced according to the Hippocratic teachings was the Xenon or "hospital" of the Pantocrator of Constantinople, which was built during the 12th century A.D. Remarkable in its efficiency and completeness, it boasted of a complete house staff which, according to Codellas, consisted of physicians in chief, residents, internes, stu-

dents, nurses, midwives, and pharmacists. The wards of the hospital were divided into medicine, surgery, ophthalmology, gynecology, and psychiatry, and there was also a busy outpatient department with a complete staff. Provision was made for the "physician on call" to remain close to his critical patients by providing sleeping quarters near-by. The Abbot in charge of these monasteries, of which the Pantocrator is a superb examble, was usually a physician; he was the "superintendant" of the hospital. Each staff physician had to conform to hospital regulations which would not allow him to make long trips, "even if the emperor had commanded," he could not leave the city while on duty, and most remarkable of all, ". . . he was forbidden to allow a staff member of lower rank and less experience to substitute for him. . . ."

Change in Monk Medicine

In addition to the monk-physicians of Medieval Europe, there is evidence that before the Norman conquest, during the 9th and 10th centuries, there were well-educated monks in England who were also well-educated physicians, trained at Salerno and other famous European medical centers. Between the 10th and 13th centuries, the most prominent and sought-after physicians were monks. During the late Middle Ages, all this was to change for the Church began the task of casting medicine from its compass of intellectual endeavor. There was evidence of this activity as early as the latter part of the 12th century when Loucas Chrysoverges, the Oecuminical Patriarch forbade priests and deacons to become physicians because of the demand which both duties made of them; he felt that their clerical duties were being neglected because of the demands the practice of medicine made upon them. The Church began issuing canons which eventually resulted in the monks' complete abandonment of medical practice. More important to the extra-monastic study of medicine was the rise of the great universities and medical schools which provided the opportunity of medical education to the laity.

The growing emphasis upon medical etiquette as well as the sacrifice of medical ethics which occurred during the late Middle Ages is evident from the following examples. John of Ardeene, an English surgeon of the 14th century warned against the physician's intimate contact with any of the feminine members of the households he visited, against underestimating the patient's illness to the family, and against speaking unkindly of his colleagues to his patients; but the reason for advising such restrictions were more political than ethical, for he felt that in observing them, the physician would inspire more confidence in his patients and thus increase his clientele! Another English practitioner of the 14th century was one John of Gaddesden, whose ethics included such practices as asking for fees before beginning treatment, and prescribing ". . . twice as much drug for his rich patients as for his poor ones." He has been called an example of his time, and a "charlatan of the first order."

As stated before, the rise of the great universities, as well as the monks' abandonment of medical education gave the laity the opportunity to study medicine. It was the 15th century and the Renaissance had begun.

English Translations

Of all the Hippocratic writings, the Hippocratic Oath was the most popular in 16th century England, for it was the one work which appeared most frequently in its English translation. According to Dr. Larkey, there were four English versions of the Oath available to 16th century readers; these appeared in: 1) *A Detection and Querimonie of the daily enormities and abuses committed in physick,* London, 1566, by John Securis: 2) *The Olde Mans Dietarie,* 1586, by Thomas Newton; 3) *A most excellent method of curing woundes,* by Arcaeus, translation by John Read in 1588; 4) *The whole course of Chirurgerie,* 1597, by Peter Lowe. All four of these translations were apparently from different sources and either contained passages which were not known to have been in Greek originals or omitted ones which were. Each of these authors must have obtained his material from more than one source.

Newton's *Oath* contains two thoughts not expressed in the known originals. First, the physician must not be squeamish about bestowing his ". . . skill in this Arte upon the poore and needie, freely, without either fee or covenant certainly agreed upon."

Newton's second addition to the *Oath* refers to the abstinence from prolonging the patient's illness in order that the physician might gain monetarily or through the prestige offered by the healing of a prolonged illness.

In Peter Lowe's version he promises he will not give poison to any person, and furthermore, he will not teach any man how to "compose" it. He also has an interesting addition that, according to Dr. Larkey, appeared in an Arabic and an early Latin manuscript. "I shall patiently sustaine the injuries, reproaches, and loathsomenesse of sick men, and all other base raylings: and that I shall eschew as much as I may, all venerious lasciviousnesse."

There is a curious mix-up of the two clauses concerned with sexual deportment and professional secrecy in Lowe's version, that according to Larkey is not present in any other known manuscript. It is written as follows:

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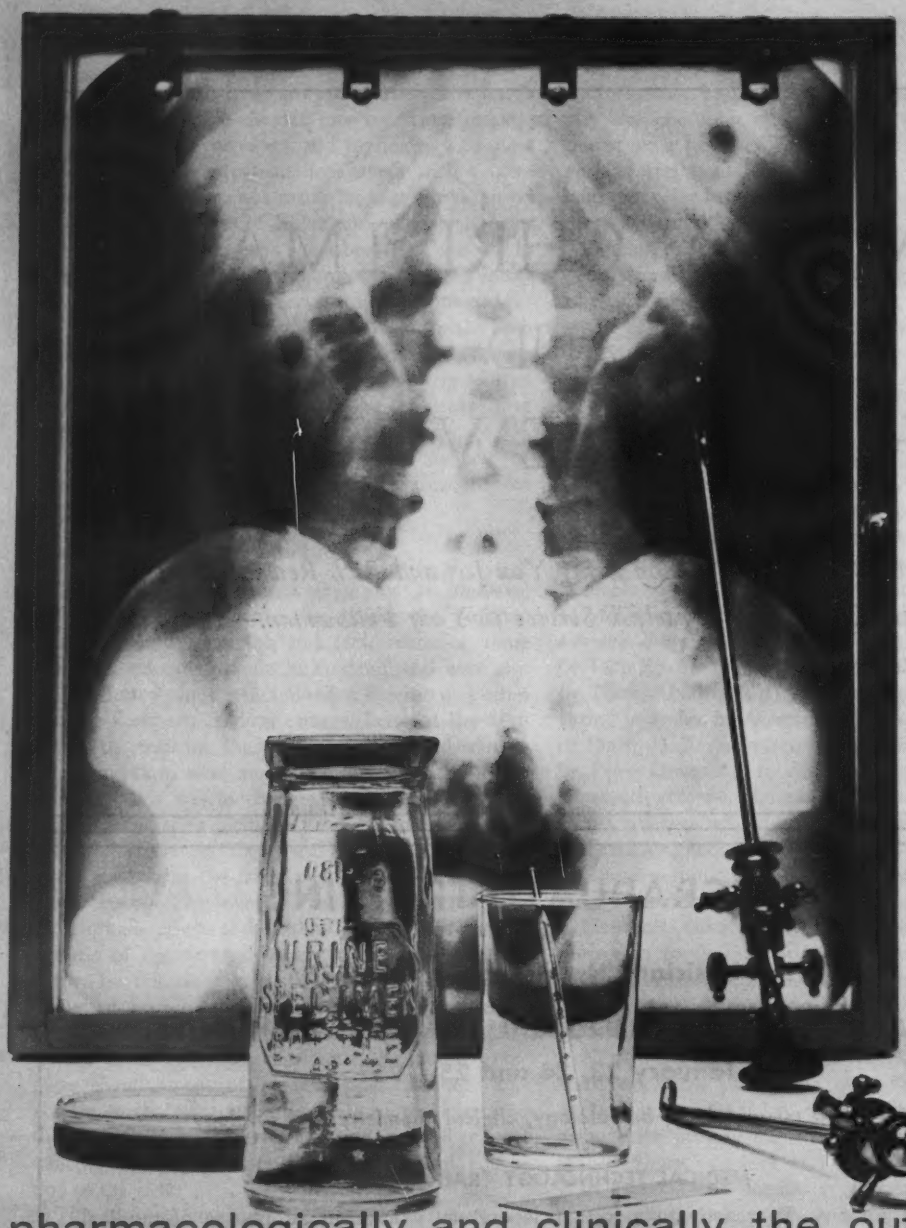

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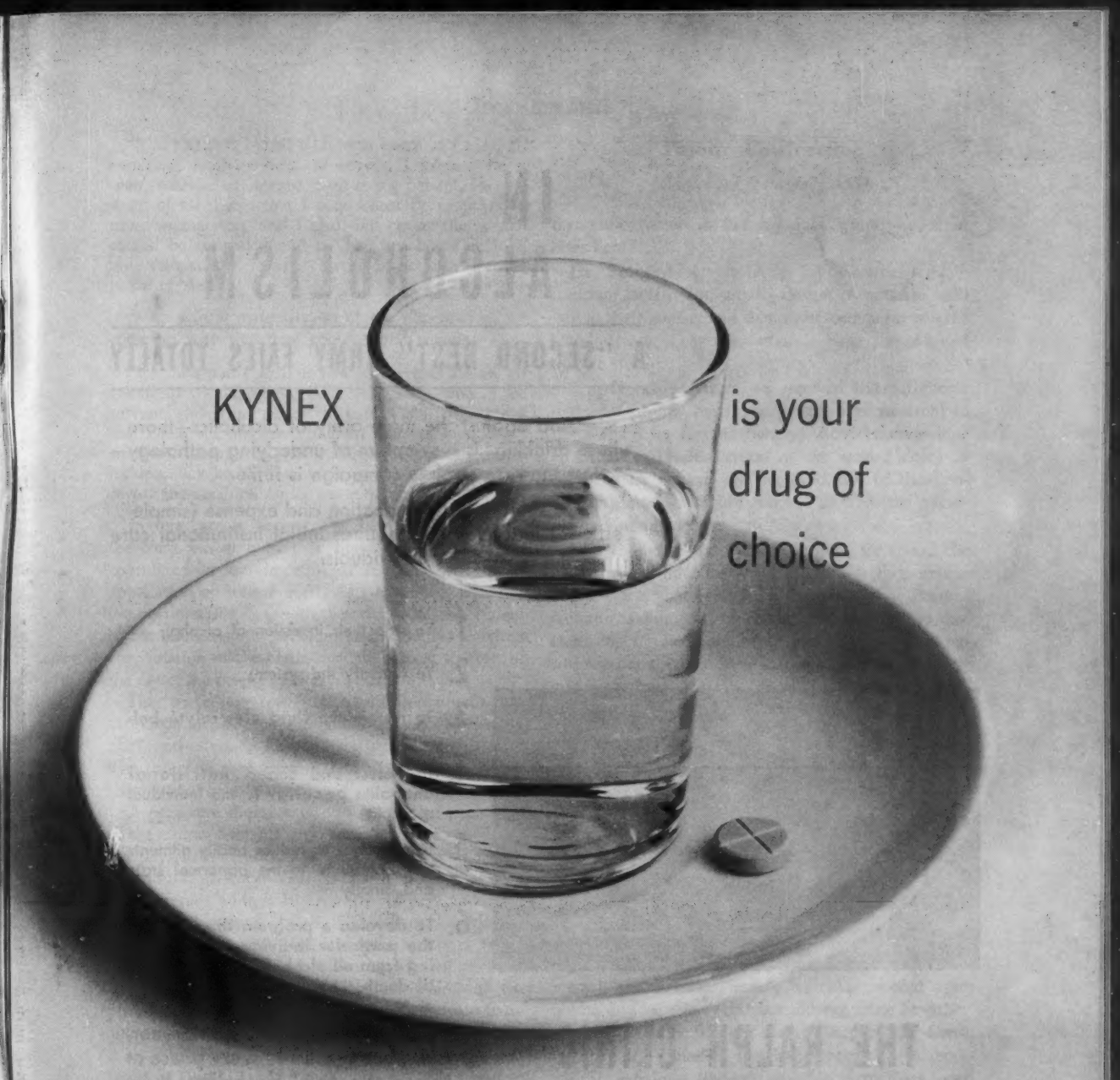
1. Boger, W. P.; Strickland, C. S., and Gylfe, J. M.: Antibiotic Med. & Clin. Ther. 3:378, (Nov.) 1956. 2. Boger, W. P.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 48. 3. Sheth, U. K.; Kulkarni, B. S., and Kamath, P. G.: Antibiotic Med. & Clin. Ther. 5:604 (Oct.) 1958. 4. Vinnicombe, J.: Ibid. 5:474 (July) 1958. 5. Anderson, P. C., and Wissinger, H. A.: U. S. Armed Forces M. J. 10:1051 (Sept.) 1959. 6. Roepke, R. R.; Maren, T. H., and Mayer, E.: Ann. New York Acad. Sc. 60:457 (Oct.) 1957.



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KYNEX Acetyl Pediatric Suspension, cherry-flavored, 250 mg. sulfamethoxypyridazine activity per teaspoonful (5 cc.). Bottles of 4 and 16 fl. oz. Recommended Dosage: Children under 80 lbs.: 1 teaspoonful (250 mg.) for each 20 lb. body weight, the first day, and ½ teaspoonful per 20 lb. per day thereafter. For children 80 lbs. and over: 4 teaspoonfuls (1.0 Gm.) initially and 2 teaspoonfuls daily thereafter. Give immediately after a meal.

KYNEX®

Sulfamethoxypyridazine Lederle

NEW—for acute G.U. infection AZO-KYNEX® Phenylazodiaminopyridine HCl—Sulfamethoxypyridazine Tablets, contains 125 mg. KYNEX in the shell with 150 mg. phenylazodiaminopyridine HCl in the core. Dosage: 2 tablets q.i.d. the first day; 1 tablet q.i.d. thereafter.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

IN ALCOHOLISM

A "SECOND BEST" ARMY FAILS TOTALLY

And against the main army of alcoholics—those whose drinking is a symptom of underlying pathology—less than a complete campaign is futile.

To shorten time, frustration and expense (simple efficient management) requires initial institutional care of these individuals:

1. To stop their ingestion of alcohol;
2. To detoxify the system;
3. To restore the fluid electrolyte balance;
4. To detect and correct nutritional anomalies peculiar to the individual alcoholic;
5. To overcome or reduce bodily ailments that contribute to the abnormal state and, finally
6. **To develop a program that will aid the particular individual in abstaining from all alcoholic beverages until death.**

THE RALPH CLINIC

529 HIGHLAND AVENUE • KANSAS CITY 6, MISSOURI

Telephone VI. 2-3622

The Ralph Clinic (in its 64th year) is in the advance of every phase of the treatment of alcoholism. It invites consultation with you concerning your patients with problems of excessive drinking.

(A portfolio about the Problem of Alcoholism is available upon request).

". . . and that I shall eschew as much as I may, all venerious lasciviousness. Moreover, I protest, be it man, woman, or servant, who is my patient, to cure them of all things that I may see or heare either in mind or manners, and I shall not betray that which should be concealed and hidden, but keepe inviolable, with silence, neither reveal any creature, under paine of death."

With a little manipulation of the punctuation, we come up with the more conventional version:

". . . and that I shall eschew as much as I may, all venerious lasciviousness, be it with man, woman, or servant who is my patient to cure. Of all the things that I may see or heare either in mind or manners, I shall not betray that which should be concealed and hidden, but keepe inviolable, with silence, neither reveal any creature, under paine of death."

In reference to Securis, Dr. Larkey writes: "That the *Oath* was of more than literary interest and was considered in an almost legal sense is seen in its application by John Securis. As I have said, he omits the portions that deal with the relation of the student to his master, with teaching, and with the penalties for violation of the Oath, but emphasized the rest of the *Oath,* the more practical aspects."

The preceding few paragraphs contain only a short commentary on the status of the *Hippocratic Oath* and ethics in England during the Renaissance. The complete story of the *Oath* during the Rennaissance cannot be told here.

A peek into the 18th century reveals an expansion of the ethics of the *Oath,* so that they were applied by the physicians to society in general, not just to their individual patients. This is most clearly seen in J. R. Frank's address to an 18th century graduating class of physicians, titled, "The People's Misery: Mother of Diseases." He is appealing for a better standard of living for the laboring classes of Italy. In his words can be found the expansion of the phrase of the *Oath* ". . . I will keep them from harm and injustice" with its Pythagorean meaning, "I deem it my duty to prevent men from doing harm to themselves." This expansion now includes all of society and Frank is in a sense saying, "I will keep society from the harm and injustice it has wrought upon itself." Here is a whisper of what is to take place during the next century, for the 18th century is beginning to realize that the public's health now needs protection, and great health reforms are beginning to take on life. That small, clear voice of a minority group of the 4th century B.C., echoing down through the vast corridors made by 2,500 years of history, now gains the proportions of a giant's bellow.

Editor's Note: References may be obtained by writing the JOURNAL OF THE KANSAS MEDICAL SOCIETY, 315 W. 4th Street, Topeka, Kansas.

Tumor Conference

(Continued from page 606)

metastatic tumor in her inguinal lymph nodes or elsewhere?

Dr. Boley: Not very likely. Liposarcomas tend to infiltrate locally, and usually do not metastasize until late in their course, and then more commonly via the blood stream. They may attain a huge size without distant spread.

Dr. Dressler: After we received the pathologic diagnosis of this mass, the patient was admitted to the hospital for further therapy. We have since done an extensive block excision of the wound down to the deep fascia, and also removed two of the lipomas in the back. Would you tell us what the microscopic findings on these are?

Dr. Boley: In the wound margins, we found the hemorrhage, inflammation and proliferating granulation tissue that would be expected in a healing wound. Examination of multiple areas failed to disclose any residual sarcoma. However, I am not too surprised at this since the sarcoma in the first specimen was almost entirely confined to the central portion of the mass. The masses removed from the back consisted of adult adipose tissue consistent with lipomas. There was no evidence of malignant change.

Dr. Don Miller: This case well illustrates the importance of removing subcutaneous lipomas or other tumors whenever there is the slightest doubt that the mass is benign. This is a good example of a mass which was thought to be a simple lipoma and turned out to be something much more important. One must have an active suspicion of possible malignancy in any subcutaneous nodule whose clinical features are at all atypical. About a year ago I removed a small subcutaneous nodule which resembled a fibroma or a sebaceous cyst but did not quite fit either diagnosis. The pathologist made a diagnosis of fibrosarcoma, and I had to recall the patient for a more radical excision. Because of this experience and others, I have a healthy respect for all subcutaneous nodules, and this is especially true if they are tender or indurated. Where malignancy is suspected, the nodule should be widely excised under a general anesthetic even though sometimes, or even frequently, the pathologic diagnosis will be that of a perfectly benign lesion.

Dr. Boley: Dr. Miller's comments cannot be overemphasized. If it is constantly borne in mind that the principal indication for the removal of tumors is their possible or potential malignancy, then inadequate excisions will become a rare occurrence.

Maternal Mortality

This 22-year-old Gravida III, Para II died in a small, well equipped hospital 11 days after a normal delivery. The baby weighed five pounds, 12 ounces. Certificate diagnosis was "post partum hemorrhage, ten days." Past obstetrical and general history were not significant. The patient's pregnancy was uneventful and prenatal care was adequate.

Labor began spontaneously at term and on admission to the hospital the patient was noted to be seven cm. dilated. Spontaneous delivery followed promptly. The placenta was expressed with no difficulty and one ampule each of Pitocin® and Ergotrate® were given. Ergotrate tablets were ordered every six hours for six doses. The patient was discharged in 48 hours having followed an entirely normal course.

Five days later she was readmitted because of hemorrhage and was seen by a physician other than the one who did the delivery. Pulse was 120 and blood pressure was from 108/70 to 80/58. Ergotrate, one ampule, and Kappadione,® five mg., were given and 1000 cc. five per cent dextrose in normal saline was started. Bleeding continued so a curettage was done three hours later by still another physician. Numerous placental remnants were removed. Two units of blood were given. A slight bloody discharge continued after this procedure and 19 hours later, another curettage was carried out with removal of more placental fragments. The uterus was packed. Some oozing continued and the following day the temperature went up to 101.4°, the pulse to 108 and blood pressure was 108/54. The pack was removed within 24 hours and the patient went home a day later with minimal vaginal bleeding, temperature 98 and apparently well stabilized.

Within five hours she was returned to the hospital with a copious pink discharge. Pre marin,® 20 mg., was given intravenously. Nine hours later the bleeding became profuse and she became faint, cold, and clammy.

The pulse was questionable and blood pressure was at shock level. Pre marin, 20 mg., was again given intravenously. Oxygen was instituted and Dextran® in saline was started along with 500 cc. of dextrose in water. Blood pressure returned to 114/70 within one hour. A pint of blood with 50 mg. Benadryl® was started in the early part of the afternoon with another unit following within 40 minutes; Desoxyn,® 40 mg., was given and the third, fourth, and fifth units of blood were given within the next three hours.

Pulmonary edema was noted with pulse increasing to 140 and a continued shock-level blood pressure. The patient expired late that same afternoon. During this time the patient had been prepared for an emergency hysterectomy but her condition deteriorated so rapidly that no surgery was started.

Committee Opinion

The post partum care of this patient would indicate that no single doctor felt completely responsible. Allowing the patient to go home 48 hours after the two curettement procedures, only to have her return in five hours and succumb in less than 24 hours suggests that the seriousness of her condition was never fully appreciated. Five pints of blood, if needed, were given too late. The immediate post partum period can be the most critical for the patient. It deserves all the attention, skill, and judgment possible.

Classification

Maternal death, direct obstetric, avoidable.

One of a series of case reports prepared by the Committee on Maternal Welfare to illustrate the type of study made in each instance of maternal death in Kansas.

The President's Message

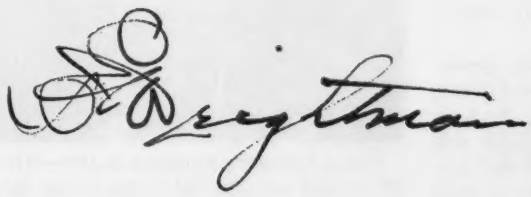
DEAR DOCTOR:

In reading a Kansas City newspaper, October 31, 1960, I noticed the election of a new president of the American Association of Medical Assistants. I took especial notice of this because going back several years, one realizes that the Kansas group had a great deal to do with the organization of the National organization.

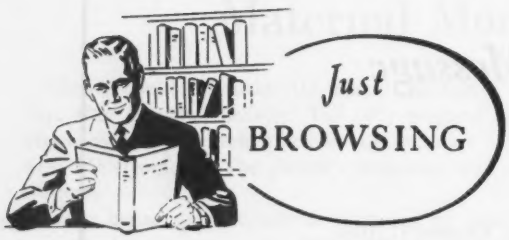
Since its inception, the organization of the Medical Assistants has come a long way. For, realizing the important part they play in the life of a busy doctor, they felt an educational program was necessary. At the present time, they have a Seminar once a year which is held at the University of Kansas. They now think that a spring workshop would be of further help in increasing their efficiency in developing still better liason between patient and doctor and in understanding the now many complexities concerning management of the present office.

Of course, in increasing their knowledge, it requires time and expense and at times, they probably wonder if it is worthwhile. Maybe if we as doctors, who reap the benefit, would give a little more encouragement by word or deed, it would stimulate further interest and continued attendance.

Yours very truly,



President



I have been privileged to preview the page-proof of *Kansas: A Pictorial History,* which has been prepared by the Kansas State Historical Society for publication and release in January 1961, as a contribution to the Centennial celebration. The Kansas Centennial Commission has joined in sponsoring the book, which portrays life in Kansas from Coronado's visit in 1541 to the present. There is enough text to make the many illustrations meaningful. Illustrations

Ferry across the Kaw at Lecompton—1867.

(some of which are depicted here) have been selected both for the portrayal of significant events, and for their pictorial quality. Reproduction is beautifully done on fine paper, and the written story is concise but thorough—as interesting as the exciting story it tells.

The early history of Kansas is a thrilling episode in a crucial period of the history of the United States, and is interesting to the country as a whole. To Kansans it has even more interest, and this book will surely be one of the most popular of all that deal with the subject. There is no way to make it more interesting than by the use of pictures, and there is no better source of pictures on this subject than the Kansas State Historical Society. This book is recommended without reservation.

A companion Centennial publication, also published by the Kansas State Historical Society is *Kansas in Maps,* by Robert W. Baughman. It portrays the growth of Kansas and related parts of the West through 90 maps, 20 pages of which are in color. These reproductions, too, are of the highest quality, and this book will appeal to any who are at all interested in Kansas' growth. It is a fitting companion to

Kung brewery workers at Leavenworth—1874.

Kansas University panorama in 1896—The buildings, left to right are: Spooner, Blake, Frazer and Snow.

Kansas: A Pictorial History. Such a double offering of books of this quality seldom comes to us.

Both books may be ordered at a pre-publication discount price. Details are available through the JOURNAL office, or from the Kansas State Historical Society.—O.R.C.

The History of the Cross

You see it in churches. It adorns monuments, flags, and heroes' medals.

But few people know the fascinating story behind the symbol of the cross.

Centuries before Christ died, it was a symbol widely known throughout the ancient world. The Egyptians called it "canob," after a T-shaped instrument used to measure the annual rise of the Nile on whose bounty the life of the nation depended. For other nations of the East, it was an "urani," and took the shape of two pieces of wood with handles. By rubbing the two sticks together, the ancients kindled sacred fire.

As early as 1225 B.C., Greek worshipers of Bacchus offered their god cakes of flour with a figure of the cross imprinted on them. The swastika, or twisted cross, which became a symbol of terror in the 20th Century, appears on the oldest medallions of the Buddhists and was a mystical good omen in many Hindu sects.

The cross was used as an instrument of national punishment in the time of Abraham. As a gallows, it was familiar to the Egyptians, Africans, Macedonians, Greeks, and Romans. To various peoples it has meant a symbol of eternal life, productive power, or the life-giving qualities of the sun.

For Christians around the world, the cross is a symbol of their faith. It was on a Roman cross at Golgotha where Christ died, only to rise again three days later, so that, according to the Bible, "whosoever believeth in Him should not perish but have everlasting life."

In their days of persecution, faithful believers used the cross as a secret pass-sign, later wore it on their foreheads as a means of recognition. In 312 A.D. the Roman Emperor Constantine was inspired by a vision of the cross in the heavens to abolish crucifixion as a capital punishment and to venerate the cross as a symbol on the coin of the realm.

The early Christians portrayed Christ as the Good Shepherd, sometimes carrying a cross instead of a crook. From this evolved the custom of representing His people as sheep or lambs. By the end of the 6th century, the first form of crucifix showed the Lamb represented on the cross itself. Crucifixes came to be widely distributed by the Church as aids to devotion.

In 726 A.D. Emporer Leo II of Turkey prohibited reverence to ikons and images. His son Constantine V subsequently outlawed every image of Christ and the saints. Despite decrees, the monks and people persisted in their veneration of the cross. The historic Second Council of Nicaea, a conference of bishops, in 787 A.D. restored images as symbols of worship, stating: "For as often as they are seen in their pictorial representations, people who look at them are ardently lifted up to the memory and love of the originals."

The cross was the badge of a crusade in 1095, and became the emblem of the medieval military religious order of the Knights of Templars.

In the New World, the Spaniards conquered New Spain in the name of the cross. But they were astonished to find the holy emblem of their own faith already the object of worship in the temples of the Aztecs. Colossal stone monuments throughout Mexico attest to an Indian civilization which adored crosses similar in design to the Greek, Latin, and Maltese forms.

The cross of Lorraine, which Joan of Arc wore into battle, became General Charles de Gaulle's symbol in leading the French resistance movement during World War II. A Swiss welfare agency which adopted as its emblem a red cross on a white field—reversing the color scheme in the Swiss flag—in 1864 organized a conference to help the sick and wounded soldiers of the world. Sixteen nations attended and established the international Red Cross.

A plain gold cross, worn in the lapel and given free to those who wish it, is the emblem adopted by the largest radio mission in the world, The Lutheran Hour. More than six million gold crosses have been issued since the sponsoring Lutheran Laymen's League presented the first broadcast of this program more than 30 years ago. The emblems are now being requested by people in Communist-controlled lands. It is aired in English and more than 50 other languages over more than 1,200 outlets in the U. S. Its estimated weekly audience around the world is 25 million persons.

Drive Safely

for a

Happy Holiday

Season

Editorial COMMENT

Rehabilitation

One of the most worth-while state operated health programs is the Kansas Vocational Rehabilitation Service where handicapped citizens are first given medical care then vocational training for employment.

State officials have cooperated in a most gratifying way with Dwight Lawson, M.D., of Topeka, State Administrative Medical Consultant, and with his advisory committee on which Conrad M. Barnes, M.D., of Seneca; J. W. Campbell, M.D., of Lawrence; H. M. Glover, M.D., of Newton; and C. D. Hensley, M.D., of Wichita, are members.

A recent example of the excellent relationship established between this agency and The Kansas Medical Society came with their adoption of the Kansas Relative Value Schedule at $4.00 a point. This is the first state operated program that will utilize the Kansas Relative Value Schedule.

Because this is a most worth-while service, and because it operates fully in keeping with the free enterprise philosophy of medical care, this program should have the support of all physicians. You will, of course, give your usual careful attention to the patient under this program who selects you as his physician, but your special cooperation with the Vocational Rehabilitation Service is needed in promptly and accurately returning the necessary medical reports.

This program is important, and with your support, it will be demonstrated that the medical profession can cooperate with a governmental agency to the benefit of the patient. Thanks very much for your help.

White House Conference on Children

The composite report of findings of the White House Conference on Children and Youth, held in Washington, D. C. March 27-April 2, 1960, has arrived. Included are some 670 separate recommendations in such fields as social service, economics, family life, recreation, religion and health.

They represent what the conference, consisting of representatives from the entire nation, believed. It is a statement of problems affecting children and recommended solutions as agreed upon by majority vote of persons selected by each state and from federal offices to bring together the widest possible experience in the area of children's services.

Selected below are the principal resolutions in the general field of health. These subjects, voted by the Conference, will receive particular attention in the future by agencies and individuals who work with children. The health items are listed here because of their special interest to the physicians of Kansas.

No. 44. That the Federal Government, together with the States, intensify present efforts to develop new water supplies and improve the distribution of existing supplies.

No. 45. That intensive research be undertaken to determine the risks from radioactive chemicals in drinking water and to find ways of removing them.

No. 46. That State and local health departments initiate crash programs for the prevention of accidents to young children; that State and local legislation provide for safety in housing, traffic, and pedestrian control, and protected, supervised play space; and that safety education be included in the school curriculum as early as possible.

No. 47. That architects and engineers be alerted to health hazards to be avoided in designing or remodeling buildings and playgrounds.

No. 48. That community programs of accident prevention and public education be intensified, covering accidents in homes, schools, recreation centers, on farms and highways; supervision of toddlers and young children, and appropriate safeguards against carelessness of adults and older children.

No. 49. That all professional workers dealing with

infants and children emphasize accident prevention.

No. 50. That further research into the causation and prevention of accidents be encouraged and supported.

No. 138. That, among other things, the curriculum include physical education of high quality for all students of elementary and secondary levels, health education and nutrition at the junior high level and mental health education based on its moral, social and biological aspects and education for family life, including sex education.

No. 188. That each community re-evalute its school health services in the light of specific needs for:

improved instruction in health education, including nutrition, child development, and physical education with more health teaching and counseling;

a school lunch program with Federal funds to supplement community resources;

continuity of preschool and school dental and medical examination records;

early recognition and prompt treatment of disabling conditions;

sufficient numbers of school health personnel to identify and diagnose health needs.

No. 189. That all school personnel, including administrators, teachers, food handlers, and custodians, be required to pass yearly physical examinations, including a test for tuberculosis.

Nos. 382 through 415 are all on the subject of health and medical services. They recommend expanded health services, including public health services; that the Children's Bureau and the American Medical Association shall experiment with new methods for supervising the health of children in sparsely settled low-income areas.

No. 387. That States or local communities require inoculation of children against communicable diseases, in accordance with the procedures set forth by such scientific bodies as the American Academy of Pediatrics, the American Public Health Association, and the U. S. Public Health Service.

No. 388. That periodic examinations and continuous medical and dental care, including vision, hearing, and other problems, early detection and treatment of defects and abnormalities, as well as the prevention and early treatment of disease, be provided for all children, including those of mobile families.

No. 390. That communities provide the fullest possible protection against tooth decay by the fluoridation of water supplies.

No. 398. That community organizations join forces to:

acquaint children and youth with the causes of alcoholism, its effect on health and related problems and on traffic safety;

propose more creative use of their leisure time through effective alternatives to alcohol;

acquaint them with the laws of the community and State regarding the sale of intoxicants to minors;

alert adolescents to the increasing evidence of casual relationship between smoking and lung cancer.

No. 404. That health insurance programs be expanded.

No. 405. That all prepaid medical and hospital plans provide for immediate care of all newborns, including prematures.

No. 406. That the old-age and survivors and disability insurance programs be strenghened by revisions in coverage and benefit schedules and by provisions for the *health* needs of child beneficiaries.

No. 407. That each State establish a comprehensive mental health service for children, preferably in association with a university medical school or center.

No. 408. That mental health services be integrated into all basic public health services, with inservice training along these lines.

No. 412. That mental health training be required for all teachers.

Nos. 547 through 623 deal with handicapped children, including physical and emotional handicaps, in general recommending increased facilities and earlier attention.

Happy New Year

From each of us to each of you—Happy New Year! We wish you good health, happiness and success. We hope for you a year of challenge interesting enough to excite your best effort, a year of broadened horizons worthy of your talent.

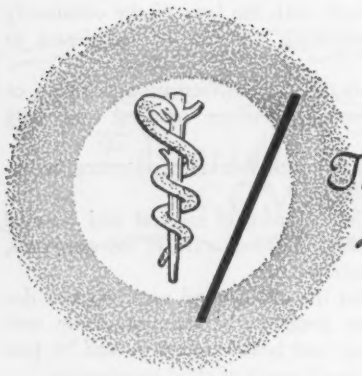
We hope something new happens, an achievement in which you take pride, an accomplishment of a goal, the realization of an ideal. We hope 1961 brings progress.

May the New Year be one of adventure with enough activity to escape boredom, with enough problems to sharpen your interest and with enough leisure to allow you time for reflection.

May your understanding bring you a new tolerance but with this, the talent to increase the knowledge of others for what it true. May your influence be proper. May you become instruments for progress and somehow, during this year, find the means for arousing in someone a new curiosity, the inspiration of an inquiring mind.

That we wish because of what it will mean to you, to the people you meet and to the practice of medicine. Each of us, your president, the officers, the

(Continued on page 623)



The Kansas Press Looks at Medicine

Editor's Note. In this section the* JOURNAL *reproduces editorials relating to medicine which have appeared in the lay press. An effort is made to include both favorable and unfavorable comments, and the Editorial Board in no instance assumes responsibility for the opinions expressed.

SANATORIUM AT NORTON SHOULD REMAIN MEDICAL

Forum Editor:

The site at Norton was selected and donated by the citizens of Norton. At that time there was a statement made as to why it was given (for the treatment of tuberculosis).

With the passing of the years the sanatorium has been beautified as it was felt that the patients who had been here for a long time should have that kind of surroundings.

In the passing of time rehabilitation has taught many patients how to work and for a long time we employed them as employes at the sanatorium. Finally it became obvious we should take care of chronic pulmonary cripples. Most of these people are short of breath. Many patients in going home found they were unable to work consistently partly because of shortness of breath and the amount of work they had to do, and they had to return.

The sanatorium finally became a fully accredited hospital, being accredited by the American College of Physicians, the American College of Surgeons, the American Hospital Association, the American Medical Association and the Canadian Medical Association, and has remained that way.

We have complete surgical equipment, operating rooms, laundry, power house, up-to-date kitchen, an All-Faith Chapel, so much so we have felt that we had the room to move Chanute patients up here and would take care of them any time.

We realize that the vacancies at the present time are caused partly by a narrow view as to what the meaning of this place is. We feel that a combined tuberculosis and chest hospital with the penal institution is decidedly not a wise choice. We feel the excess beds that are available at the present time should be used but we know there are many other ways to utilize these beds. We feel that any use of them should be along strictly a medical line.—LORETTA STEINKELLNER, Norton, Kan. *Topeka Daily Capital,* Nov. 5, 1960.

FAMILY DOCTOR NOT VANISHING

By EILEEN FOLEY

Approximately 150 general practitioners of Kansas are convening in the Baker this week—and not one horse and buggy parked in front of the building.

Has the long-revered "horse and buggy" doctor disappeared along with his outdated mode of transportation?

"No," comes the resounding reply from a modern-day medicine man. "The family doctor isn't vanishing—I think in the wake of the recent trend toward specialization that the public demands a return to his form of treatment."

Dr. O. J. Friesen of Buhler was doing the speculating. Only 33, he chose to become a general practitioner long before graduating from the University of Kansas School of Medicine four years ago.

He chose it because, in his words, "I felt I could more completely fulfill the medical needs of the entire individual this way."

"I don't plan to specialize," he added, "I have established my home in Buhler and expect to be there permanently, to serve that rural community."

It was more than a half-century ago that the horse-and-buggy doctor legend developed—a saint-like soul who sprinted through snow to set a broken leg, deliver

a baby, or simply listen to troubles, he had a more flawless reputation than the "through snow, rain and ice" postman.

One reason for such individual attention, conclude most analysts, was the overproduction of doctors which left one for every 568 persons. Today, with the rising costs and standards of medical education, there is only one doctor for every 709, and from 1931 to 1959 alone the ratio of family physicians dropped from 90 for every hundred thousand persons, to 46.

Sorely Needed

With the introduction of preventive medicine and scientific research, the expert skills of the specialist were sorely needed, and thus the trend developed.

But, says Dr. Friesen, this trend also has drawbacks. In focussing on his particular field of interest a specialist may miss a manifestation of illness in the field of another.

"A patient still needs to be treated as an individual," he said, "for disease affects his whole life, and sometimes family and home-connected situations are at fault."

"A family doctor can establish a more personal relationship with the patient," he said. "It's not easy for one to confide in a doctor he doesn't know—it takes much time to build up such confidence."

There are occasions, of course, when a specialist should be called in, he continued, "but this should be left up to the judgment of the general practitioner —he has had four years of medical school beyond college, and a year of internship—he is competent to make this decision."

The family doctor, then, as he sees it, is not only a health-restorer to his community, but can be a coordinator of specific health problems, one who looks at the whole patient picture—has his complete history, physical examination, laboratory study and continuing care.

How about the calls in the middle of the night? Do doctors still clamber out of bed to drive miles through the cold? (For some reason, every horse-and-buggy doctor story is set in the WINTER.)

Young Dr. Friesen squinted, mentally figuring the miles he makes during a month, and calculated 1,500.

"I make housecalls any time," he said, "unless I'm certain that an office visit would be more advantageous —unless they need laboratory or X-ray examination."

As for the night calls—he averages two hours an evening, with "regular" working hours from 7:30 a.m. to 6 p.m. daily, depending upon the demand.

But, concluded Dr. Friesen, the demand is there, and although the role of the family doctor has changed—he, for example, no longer is expected to make as many housecalls because of good roads and cars carrying the patient to town, nor to stay at the bedside until death due to modern hospital facilities —the physician who is a friend as well as a scientist is not fading.—*Hutchinson News,* October 21, 1960.

Editorials

(Continued from page 621)

editorial board of the JOURNAL and the personnel in your executive office, aware of what this could mean to the Kansas Medical Society, fervently ask that a little of the above also fall upon ourselves in your service.

Medical Assistants Pilot Workshop

The Education Committee of the Kansas Medical Assistants Society recently met with representatives of the University of Kansas Extension Department and the Kansas Medical Society Advisory Committee, to formulate plans for a two-day pilot workshop to be held at the Kansas University Medical School in April, 1961. This will be a forerunner of four or five similar circuit course workshops to be held in strategically located points over the state.

The primary purpose of these workshops will be to better enable the Medical Assistant to deal successfully with the patient on behalf of the physician. Those attending will learn of the latest developments in office procedures, which includes bookkeeping, collections, correspondence, filing, telephone techniques, etc. Specialists will learn of the latest developments in their field. It should be emphasized that this will be a participation workshop where Assistants will actually use the various techniques and procedures offered in the course.

Two Medical Assistants from each of the 21 member county Medical Assistants Societies will be carefully selected to attend this initial program, with the thought in mind that they will return to their respective societies to report on what they have learned.

The cost of putting on such a program has been established at $25 per person, plus transportation and, since the purpose of this course is to enable the Medical Assistant to do a better job for the individual physician, it was recommended by the Kansas Medical Society Advisory Committee on Medical Assistants that local medical societies sponsor two local representatives by providing two $25 scholarships.

Nationally, Medical Assistants have achieved an enviable record in establishing educational programs which will better enable them to serve the doctor and the patient. This state program is worthy of the support of the Medical Profession, particularly since it comes at a time when there is need for better understanding and closer relationship between the Medical Profession and the public. It is important that this program be supported individually and collectively, to assure its success.

The Business Side of Medicine

Selecting an Investment Fund

FLOYD F. WEHRENBERG, ***Kansas City, Missouri***

In previous articles we have discussed balancing of an investment portfolio with fixed and variable type investments and dollar averaging of cost.

The average doctor today has limited knowledge of investments and even more limited time for managing them. A properly selected program of monthly accumulation in one or more high-grade investment funds offers many advantages to him and can be used to fulfill his need for variable type investments. Such a program includes the advantages of capable management, diversification, dollar averaging of cost and outstanding growth potential.

How to Select One

How should a fund be selected for such a program? The market value factor with regard to investment fund shares is not an accident; the elements of diversification, selection and supervision play a major role in determining the value of a fund's shares at any given time.

One of the most common terms in the field of investment funds is "performance." This is used to indicate the varying results which fund managements have obtained, the results an investor might have achieved by investing in a given fund and, finally, the results of a fund which may be compared with other investment media.

What constitutes performance? (a) The change in market value of the shares over a given period; (b) income dividends paid by the fund; and (c) the amount of distributions made from security profits (capital gain dividends). These three combined constitute the measure of a fund's management ability to serve the shareholder within limits of a stated investment policy and a pre-set investment objective.

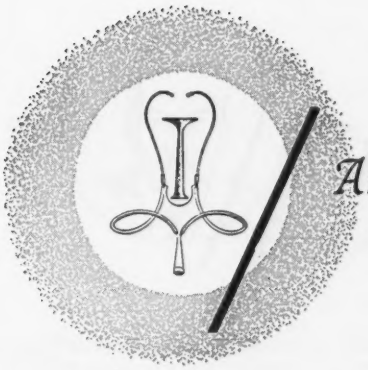
Consider the first of these factors, market value. If diversification is inadequate, shares of the fund will be subject to wider fluctuaton and greater risk; if selection is poor, fund shares will undoubtedly fail to reflect the general trend of the market; and if supervision is poor, the attainment of the fund's investment objective is certain to fail.

Another indication of management's ability is the amount of dividends and capital gains distributions paid over a given period. For example, a fund that is organized primarily to produce income will accomplish that purpose if properly managed while a fund geared to capital growth will show a greater appreciation and generally pay less income dividends if properly managed. A fund's dividend history will reveal how well it has achieved its goal.

It is frequently stated that on the average investment funds fail to perform as well as certain market indices. While this comment is statistically true, a simple but devastating fact is overlooked; that is, that an investor cannot buy a general market index so at no time can this index be a measure of actual or theoretical investor experience. The most a market index can show is a dominant trend.

(Continued on page 630)

Mr. Wehrenberg is Missouri-Kansas Manager, Professional Management Midwest, 4010 Washington Street, Kansas City, Missouri.



Announcements

Professional meetings, conferences, and postgraduate courses of national importance are listed for the **Doctor's Calendar.** ***Notice of the session is posted in advance to allow the physician time to make preparations.***

American Board of Obstetrics and Gynecology announces that the Part 1 Examinations (Written) will be held in various cities of the United States, Canada, and military centers outside the Continental United States on Friday, January 13, 1961.

Reopened Candidates will be required to submit Case Reports for review thirty days after notification of eligibility. No reopened candidate may take the Written Examination unless the case abstracts have been received in the office of the Executive Secretary.

Current Bulletins outlining present requirements may be obtained by writing to the Executive Secretary's office. Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

The Annual Cardiovascular Seminar, sponsored by the Northeast Florida Heart Association, is now in its eighth year and is developing national interest. The Seminar will be held at the Prudential Auditorium, Jacksonville, Florida, January 26, 27 and 28, 1961.

The participating physicians are the following: Dr. William Dock, Prof. Medicine, New York State University; Dr. Lewis Dexter, Asst. Prof., Harvard University Medical School; Dr. Milton Rosenbaum, Prof. and Chairman, Dept. of Psychiatry, Albert Einstein College of Medicine; Dr. Richard Ebert, Prof. and Chairman, Dept. Medicine, University of Arkansas School of Medicine.

Further details and programs may be obtained by writing to Daniel R. Usdin, M.D., President.

The Gill Memorial Eye, Ear and Throat Hospital will hold its Thirty-Fourth Annual Spring Congress in Ophthalmology and Otolaryngology and Allied Specialties, April 10 through April 15, 1961. There will be 20 guest speakers and 50 lectures.

Further information may be obtained by writing E. G. Gill, M.D., Roanoke, Virginia.

The IVth International Congress of Allergology will be held at the Hotel Commodore, New York City, October 15-20, 1961. It is anticipated that this will be a large and interesting meeting for all of those concerned with allergic diseases and related fields of immunology. At the main meetings there will be simultaneous translations of all papers in English, French, German and Spanish. Prominent physicians and scientists, from all parts of the world, have been invited to take part in conferences, symposia and panel discussions. Among the subjects to be presented are:

> Genetics in allergy; Acquired tolerance; Transplantation immunity; Drug hypersensitivity; Contact allergy; General mechanisms in allergy; Mechanisms of antibody fixation; Delayed hypersensitivity; Auto immune processes; Steroid therapy; New methods in allergy, etc.

All physicians registering are invited to present communications which will be grouped in various sections according to subject matter. An active program of entertainment is being arranged with several receptions, one at the Metropolitan Museum of Art, and a Banquet. For the ladies, there will be a program of luncheons, fashion shows, and visits to the United Nations and other points of interest.

The registration fee for regular members will be $45.00, for wives $20.00. These registration fees will include the printed proceedings and admission to the receptions. The banquet will be charged separately. As the attendance is expected to be large, it is requested that persons interested obtain additional information from Dr. William B. Sherman, 60 East 58th Street, New York 22, New York.

Blue Shield

New Forms for Statements

New Blue Shield Statement Forms have been distributed to practically all of the 1,800 Participating Physicians in Kansas.

Presented on this page is a reproduction of the first sheet of this new form. The second sheet is attached and clearly marked "PHYSICIAN'S COPY" and is to be retained by the physician when the first sheet is mailed to Blue Shield.

An ample supply of these forms was mailed to each physician, accompanied by an order blank for additional forms.

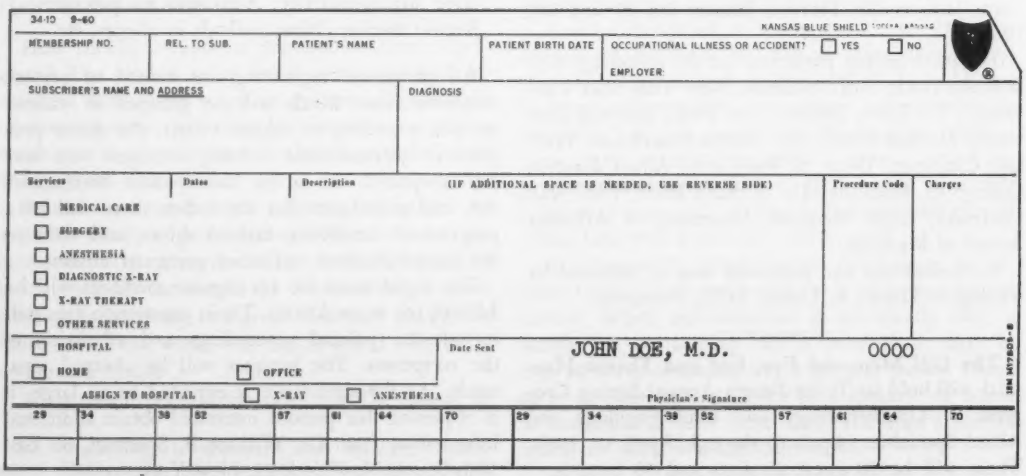
Introduced Earlier

This new Blue Shield Service Statement Form is the one introduced early this year with an eye to eliminating possibilities for errors, as well as saving time and money in operation. It is expected that it will result in more accurate payments to the physicians, and will also make it easier for medical assistants to complete, since information on these new forms has been reduced to a minimum.

This new card-form Service Statement is the size of an IBM punched card. It was first tried as an experiment with about fifty of the physicians in the Topeka area. It met with almost unanimous approval from both the physicians and their medical assistants in this initial group. They stated that it made their work far simpler, as well as helping to eliminate chances for error on their part.

The card which has now been mailed to all physicians has been redesigned in accordance with suggestions made by the Topeka physicians who used it.

(Continued on page 631)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KANSAS BLUE SHIELD TOPEKA, KANSAS

MEMBERSHIP NO.	REL. TO SUB.	PATIENT'S NAME	PATIENT BIRTH DATE	OCCUPATIONAL ILLNESS OR ACCIDENT? ☐ YES ☐ NO EMPLOYER

SUBSCRIBER'S NAME AND ADDRESS

DIAGNOSIS

Services	Dates	Description (IF ADDITIONAL SPACE IS NEEDED, USE REVERSE SIDE)	Procedure Code	Charges
☐ MEDICAL CARE				
☐ SURGERY				
☐ ANESTHESIA				
☐ DIAGNOSTIC X-RAY				
☐ X-RAY THERAPY				
☐ OTHER SERVICES				

☐ HOSPITAL
☐ HOME ☐ OFFICE

Date Sent JOHN DOE, M.D. 0000

ASSIGN TO HOSPITAL ☐ X-RAY ☐ ANESTHESIA

Physician's Signature

IBM M7605-8

29	34	38	52	57	61	64	70	29	34	38	52	57	61	64	70

Personalities—IN KANSAS MEDICINE

Dr. Robert Fairchild, Mission, spoke on "Health Problems of the Pre-School Child" recently at a meeting of the Overland Park Pre-school parents.

Dr. Fairchild is affiliated with the Mission Clinic, Mission.

Drs. D. J. Cronin, N. L. Francis, C. L. Gray, E. M. Harms, W. P. McKnight, D. A. Shrader, J. S. Reifsneider, E. E. Tippin, Jr., and **L. P. Warren,** Wichita, were among those attending the American Academy of Ophthalmology and Otolaryngology meeting in Chicago, October 5-8.

The Kansas Chapter of the American College of Surgeons held a meeting in Ellsworth with 40 doctors in attendance. **Dr. Clair O'Donnell,** Ellsworth, is president of the college for the coming year. President-elect is **Dr. William Valk** of Kansas City. A scientific program was presented in the morning and afternoon sessions.

Dr. Mary J. Blood, Wichita, attended the American Academy of Pediatrics meeting in Chicago, October 17-20.

Dr. Kenneth J. Gleason, Independence, was elected chief of staff at the annual election held during the November luncheon meeting of the Mercy Hospital staff in Independence. He succeeds **Dr. M. K. Borklund.**

Other officers for the coming year are: **Dr. Edgar H. Beahm,** chief elect; **Dr. William Chappuie,** secretary-treasurer.

NEW MEMBERS

The JOURNAL *takes this opportunity to welcome these new members into the Kansas Medical Society.*

Albert A. Armbruster, M.D.
6001 W. 56th
Mission, Kansas

Lewis C. Blackburn, M.D.
600 Main Street
Galena, Kansas

Dr. Katherine Pennington attended the American Heart Association meeting in St. Louis, October 21-25.

Dr. D. G. Laury, Ottawa, began a three-day postgraduate course in obstetrics recently in Kansas City, commuting daily to attend.

Dr. Charles Rombold, Wichita, is author of an article in the July, 1960 issue of *The Journal of Bone and Joint Surgery* entitled, "Depressed Fractures of the Tibial Plateau, Treatment With Rigid Internal Fixation and Early Mobilization. A Preliminary Report."

Dr. R. Dale Dickson, Topeka, was elected president of the Shawnee County Medical Society at its 59th annual meeting. He succeeds retiring president **Dr. W. O. Martin,** Topeka.

Drs. A. E. Hiebert and **H. W. Brooks,** Wichita, attended the American Society of Plastic and Reconstructive Surgery meeting in Los Angeles, October 2-7.

Kansas Dietetic Assn. members attending the fall meeting in Wichita at the Allis Hotel heard **Dr. D. V. Preheim** of the Bethel Deaconess Hospital of Newton, Kansas, discuss the role of enzymes in the medical profession today.

Dr. Ralph L. Drake, Wichita, attended the meeting of the Multiple Sclerosis Society held in Kansas City, October 6-9.

R. G. Sheppard, M.D., Smith Center, was initiat-

(Continued on page 630)

KMS Obituaries

DAVID T. LOY, M.D.

Dr. David T. Loy, 52, an ophthalmologist in Great Bend since 1939, died November 3, at St. Rose Hospital. Death was attributed to a heart ailment which had restricted his practice for the past five years.

Dr. Loy was born at Council Grove on October 26, 1908, the son of Mr. and Mrs. Jerone S. Loy. He was graduated from the University of Kansas School of Medicine in 1935, and was a member of Alpha Omega Alpha and Sigma Xi honor societies. He moved to Great Bend in June, 1939. In 1946 and 1947 Dr. Loy returned to the K.U. Medical Center to do post-graduate work in ophthalmology and in 1949 he received his board certification and became a diplomate of the American Academy of Ophthalmology. He served as an instructor at K.U. during part of his studies there.

His survivors include his wife, one son, a grandson, a nephew, two sisters, and his mother.

R. A. STEWART, M.D.

Dr. R. A. Stewart, pioneer Kansas physician who organized the first hospital in Hutchinson, died of a cerebral hemorrhage on October 25. He was 92 years old.

Dr. Stewart was born January 20, 1868, at Stewartsville, Va., and moved with his family to Alden in 1881. He graduated from Louisville University in 1890, and moved to Hutchinson in 1891.

Dr. Stewart and his brother, Dr. J. E. Stewart, established the first hospital in Hutchinson. It was one of the first in the state.

Dr. Stewart was an early-day member of the First Methodist Church in Hutchinson having been a member for 69 years.

Dr. Stewart made his home with his daughter. Other surviving relatives are a son and three grandchildren.

E. L. KALBFLEISCH, M.D.

Dr. Ernest L. Kalbfleisch, 78, who practiced medicine in Newton for many years passed away August 27 in Phoenix, Arizona at the Valley of the Sun Nursing Home.

Dr. Kalbfleisch was born in 1882 and attended Columbia University College of Physicians and Surgeons in New York City, where he received his M.D. degree in 1916.

He was a member of the Harvey County Medical Society since 1933 and retained his membership in our Society after moving to Arizona.

Christmas Behind the Iron Curtain

Russian propaganda doesn't overlook a thing—it is even directed against Christmas. Says Khrushchev: "There is no room in the modern Soviet for the religious superstitions which give meaning to the observance of Christmas."

A milestone in the Soviet onslaught on the Christmas joys of normal childhood was reached in the mid 1950s, when the Ministry of Light Industries for captive Eastern Europe decreed that "Children's toys may be produced for propaganda purposes only . . . dolls, teddy bears, and other toy animals must be dressed in uniforms of the Communist Party army, police or organized labor groups."

While this edict inflamed parents, it inspired the toy makers. They marketed an ideological game called "Path to Peace," which was widely distributed at Christmas time in public halls and schools by Father Frost, the Red substitute for Santa Claus.

Since the "Paths to Peace" game was bewildering even to mature adults, it definitely was not for children with below-average I.Q.'s. The tools of the game consisted of a map of the globe and six dice carved with colored peace doves. If, after a player cast his dice, he reached the capital of a "People's Democracy"—a Red-controlled country such as Romania, Bulgaria, Poland, Hungary, Czechoslovakia—he won a point. But if he reached a Western capital, he lost all his points. He was even worse off if he landed in Washington, D. C.—he was thrown out of the game! One capital significantly missing was Belgrade, because Communist officials who censored the game during its initial production could not decide whether landing in the Yugoslav capital was an advantage or not. Presumably, an improvement in diplomatic relations with the Yugoslav leader Tito might some day put Belgrade back on the map.

Humor as a Weapon

Though Christmas is generally a drab affair behind the Iron Curtain, there are signs of hope poking up like crocuses through the hard crust of Soviet repression. Shortages in the stores around Christmas time come in for ridicule in the Polish press. A cartoon in a Warsaw newspaper showed an angry crowd jamming around a depleted toy store counter before Christmas. Stuck in the throng are two department store St. Nicholases, and one says to the other: "One must be a saint, indeed, colleague, to stand this."

Humor is one of the few weapons that the Davids of the press in the captive lands have to combat the humorless Goliath of the Party propaganda machine. While the Church press continues to expound the Christian doctrine of the birth of Christ, its efforts are usually rigidly controlled. The Party press tends either to omit mention of Christmas or stress its worldly or social aspects.

Free World Pressure

The captive press does what it can to needle the Communists from within, while strong assaults on the Iron Curtain come from the outside. Radio broadcasts from the Free World are tearing an increasingly larger hole in the Iron Curtain. For the past ten years, 76 million people in the conquered countries have relied on Radio Free Europe's broadcasts as their strongest day-and-night link with the Western World. And for the sixth straight year, The Lutheran Hour's annual Christmas broadcast will be beamed from radio networks in Russian satellite countries. This year the message of Christ will be broadcast over networks in Czechoslovakia, East Germany, Hungary, Poland, Romania, and Yugoslavia, as well as other lands throughout the world. Dr. Oswald Hoffmann, regular Lutheran Hour speaker, will read the Biblical account of the Savior's birth and will offer a Christmas prayer to conclude the special worldwide broad-

Despite every pressure exerted against it, Christmas church attendance has grown to acceptability in Soviet satellite states.

cast, which will be sent to about 55 countries in 30 languages.

The Soviet "Christmas"

Long a harassed refugee from Communist rule in Eastern Europe, Christmas is making a comeback in Poland, Hungary and Czechoslovakia. In Romania and Bulgaria, however, it has never emerged from the pall of Stalinism.

But even at the peak of Stalinist rule, the Party did not attempt a direct all-out assault on Christmas. The technique was to divert attention from it by splitting up its symbols and ceremonies between Stalin's birthday on December 21 and New Year's Day, with Christmas an ordinary working day in between. The Christmas tree became simply a "winter tree," and Saint Nicholas (Santa Claus or Father Christmas, as the local custom might be), became the Soviet "Father Frost" distributing gifts to the children on New Year's Day as a symbol of Soviet generosity toward the satellites.

After 1953, the reaction against Stalinism plus an emphasis on national culture and living standards, brought back some of the regional holiday customs. Increased tolerance toward religious worship restored a measure of the Christian meaning of Christmas. Even in rigidly controlled Czechoslovakia, mass church attendance on Christmas Eve appeared to be acceptable by 1956.

Christmas Day is still a working day, with no decorative signs of the season visible. The holiday has taken refuge in the countryside where the peasants, freer from scrutiny and with at least the fruit of their own farm plots, can still give it a token welcome. The Poles hold their traditional family Christmas Dinner on Christmas Eve, and place straw on the table to symbolize the straw-lined manger of Bethlehem. It is also traditional to set an extra place at the table as an indication of hospitality to a passing stranger. The Christmas Eve menu is meatless and composed mainly of fish delicacies, such as fish noodle soup, carp in sweet raisin sauce, and pike in horseradish sauce. The meal concludes with such desserts as poppy seed strudels and *kutia* made from wheat and honey.

Father Frost

Father Frost, the Soviet answer to Santa Claus, is a flat-stomached male athlete, sometimes bearded but mostly not, whose muscularity is demonstrated by the fact that he can drive his red sleigh apparently with greater skill than the mythical "eight reindeer." But for all his physical prowess, his career has been spotty. Forcibly introduced into the satellite countries between 1950 and 1952, he was passively assimilated in Bulgaria, totally rejected in Hungary, and merely tolerated for three or four years by the Poles who then threw him out with the rest of the trappings of Stalinism.

The Soviets will doubtless continue trying to put a "frost" on Christmas in the satellite countries, but such forces for truth as the Free World's radio broadcasts and the undying spirit of freedom among the conquered peoples show signs of thawing the cold front presented by the Iron Curtain.

The Business Side of Medicine

(Continued from page 624)

Comparing Relative Things

When making comparisons the fund investor should compare the things that are relative to each other; that is, compare funds with similar investment policies and objectives and fund results with what he himself could do on his own. Actual comparisons have shown that just as funds fail to equal market indices, so do a large proportion of individual investors' stock portfolios.

To summarize, performance is the most important single factor in judging the merits of an investment fund. Too often familiarity with a fund, local availability of a fund or the amount of load or brokerage charge is erroneously used as a basis for making a choice.

Performance records on the many funds are available through your broker, investment counselor, and through such publications as Wisenberger's "Investment Companies" and Johnson's "Investment Company Charts." These performance records should be studied carefully before a choice is made.

Personalities

(Continued from page 627)

ed into membership in the American College of Surgeons in San Francisco in October.

Dr. C. Arden Miller, Dean, University of Kansas Medical School, presented a speech before the Tri-County meeting of the Marion, Harvey, and McPherson County Medical Societies recently. His topic was "Hopes for the Future Expansion of K.U.M.C." Also speaking at this meeting was **Dr. Galen M. Tice,** chairman, Department of Radiology, K.U.M.C. Dr. Tice's subject was "Upper Gastrointestinal Lesions by X-ray."

Dr. Joseph A. Budetti, Wichita, attended by invitation the International Symposium on Otosclerosis held at the Henry Ford Hospital in Detroit on November 10-12.

The Urge to Sue

Growth of Malpractice Suits Has Put U. S. Doctors on the Defensive; Last Year's Cases Totaled Estimated $50 Million in Costs and Settlements.

More and more U. S. doctors are learning a bitter lesson: medicine is an inexact science, but there is little room for error as far as the courts are concerned. According to the American Medical Association, one in every seven physicians has been sued for giving treatment that a court may decide is contrary to accepted rules and injurious to the patient. Last year alone, 6,000 doctors were sued. Jury awards in malpractice suits have nearly trebled since 1950; lawyers' fees, court costs, damages and out-of-court settlements in last year's cases totaled an estimated $50 million.

The result, *Time* says in a survey of the growing trend, is that almost 95 per cent of all U. S. doctors carry malpractice insurance and many feel like sitting pigeons for unscrupulous patients and lawyers. Some doctors now dodge giving aid in Good Samaritan cases, which form a small but rich field for malpractice suits. Such emergency accident cases demand haste, often catch the doctor ill-equipped and ill-prepared.

Doctors Vs. Lawyers

General Counsel C. Joseph Stetler of the A.M.A. attributes the urge to sue on exaggerated stories of new drugs, methods of treatment and "miracle" surgery, which "lead the public to believe that anything less than a perfect result is per se evidence of negligence." Some doctors insist that only 10 per cent of all malpractice suits have any merit; the rest, they claim, are nothing more than "legalized blackmail."

Not so, say trial attorneys like San Francisco's Melvin M. Belli, who estimates that he has filed more than 1,000 malpractice suits (75 actually went to trial), relieved doctors and insurance companies of $8,000,000 in judgments and out-of-court settlements. Belli says that "most of the verdicts are justified, because judges and the law have put so many safeguards around doctors." He points out that in some states (e.g. Arizona, New Mexico) malpractice suits are "very rare indeed," because doctors flatly refuse to give testimony that would show medical negligence by their colleagues. Doctors' self-imposed silence has prompted two states—Massachusetts and Nevada—to permit use of standard textbooks in court to establish prudent practice.

Lost Sponges, Mismatched Blood

A.M.A. studies show that two-thirds of malpractice claims originate from in-hospital accidents. Sponges occasionally are sewn into patients' stomachs (a group of California hospitals recently reported a run on "lost sponges"—18 in a single year). Obstetricians have been known to deliver one baby and quit, leaving its twin behind. Surgeons have removed a kidney only to discover that one is all the patient had. A more common cause: transfusions of mismatched blood, which kill about 3,000 patients a year in the U. S., injure thousands more. In such cases, where human error is clearly responsible, courts hold that the injured patient need not produce expert testimony to prove the physician's negligence.

Doctors also have been sued for failing to spell out risks. *Earlier this year, after a Kansas woman suffered burns from radio-active cobalt therapy for her breast cancer, her physician was judged negligent—even though the treatment was skillfully performed—simply because he failed to tell her there was risk of radiation burn and therefore, said the court, had not obtained her "informed consent" to the treatment.*

(Ed. Note: The JOURNAL has carried several articles about this court action.)

St. Peter Says Go Back

Out of fear of malpractice suits, many doctors have become careful, and even ultra-cautious, about the kind of medicine they practice. The results: higher costs and—in certain cases—poorer medical care. Some anesthetists now shy away from medically advisable spinals, because the public imagines them to be dangerous and thus is prone to sue if something goes wrong. Many general practitioners no longer will dispense telephone advice or permit prescription refills. Doctors dislike these dodges, but they feel in real pocketbook danger. A joke going the rounds among physicians has St. Peter greet a man at the gates of heaven saying: "You weren't due here until 1965. Go back and sue your doctor for malpractice."

Blue Shield

(Continued from page 626)

Physician's Name on the Card

One quite important change in the new form is the fact that the physician's name and code number will appear on the card when it is received by him. It is believed that this one change alone will serve to greatly reduce errors in payment.

This new form will be *used only in standard cases.* It does *not* eliminate the forms for "individual consideration" and "intensive medical care" cases.

If there are questions about the new forms, or if any physicians have not received their supply, they should contact Blue Cross-Blue Shield, 1133 Topeka Boulevard, Topeka, immediately.

The Kansas Medical Society—1960-1961

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Chase		
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Cherokee	F. H. Jones, Columbus	H. L. Bogan, Baxter Springs
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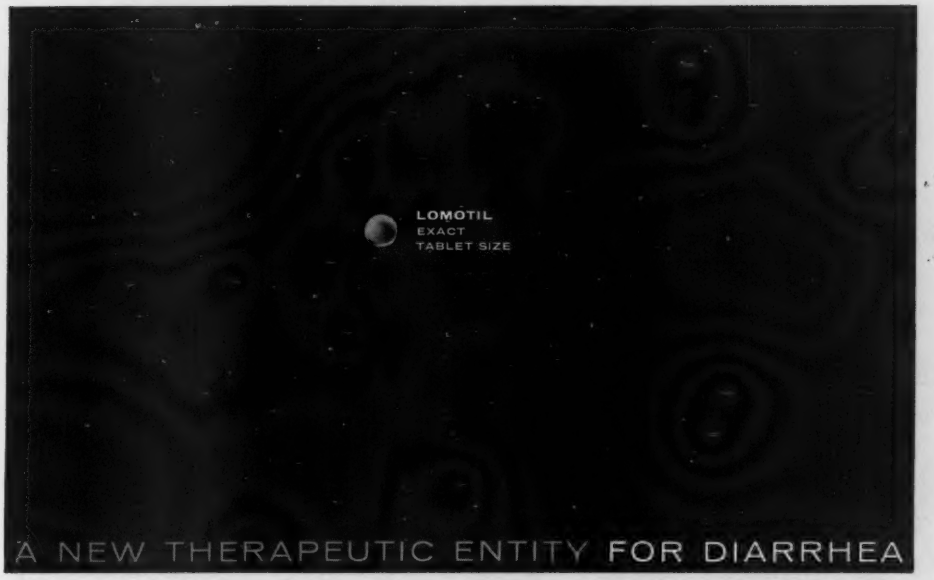

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LOMOTIL®

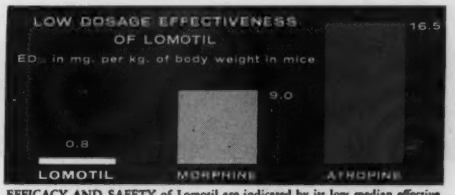
SELECTIVELY LOWERS PROPULSIVE MOTILITY

LOMOTIL represents a major advance over the opium derivatives in controlling the propulsive hypermotility occurring in diarrhea.

Precise quantitative pharmacologic studies demonstrate that Lomotil controls intestinal propulsion in approximately $\frac{1}{11}$ the dosage of morphine and $\frac{1}{20}$ the dosage of atropine and that therapeutic doses of Lomotil produce few or none of the diffuse untoward effects of these agents.

Clinical experience in 1,314 patients amply supports these findings. Even in such a severe test of antidiarrheal effectiveness as the colonic hyperactivity in patients with colectomy, Lomotil is effective in significantly slowing the fecal stream.

Whenever a paregoric-like action is indicated, Lomotil now offers positive antidiarrheal control . . . with safety and greater convenience. In addition, as a nonrefillable prescription product, Lomotil offers the physician full control of his patients' medication.



EFFICACY AND SAFETY of Lomotil are indicated by its low median effective dose. As measured by inhibition of charcoal propulsion in mice, Lomotil was effective in about $\frac{1}{11}$ the dosage of morphine hydrochloride and in about $\frac{1}{20}$ the dosage of atropine sulfate.

PRECAUTION: While it is necessary to classify Lomotil as a narcotic, no instance of addiction has been encountered in patients taking therapeutic doses. The abuse liability of Lomotil is comparable with that of codeine. Patients have taken therapeutic doses of Lomotil daily for as long as 300 days without showing withdrawal symptoms, even when challenged with nalorphine.

Recommended dosages should not be exceeded.

DOSAGE: The recommended initial dosage for adults is two tablets (5 mg.) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is controlled. Maintenance dosage may be as low as two tablets daily. Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is supplied as unscored, uncoated white tablets of 2.5 mg., each containing 0.025 mg. ($\frac{1}{2400}$ gr.) of atropine sulfate to discourage deliberate overdosage.

Subject to Federal Narcotic Law.

Descriptive literature and directions for use available in Physicians' New Product Brochure No. 81 from

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In the long term control of serum cholesterol, dietary therapy can achieve the objective in the manner most closely approximating physiological norm.

The long term control of elevated serum cholesterol through changes in the dietary pattern of the patient puts nature's own process to work most effectively to achieve the objectives of treatment. Here are the beneficial features of dietary therapy:

Offers a solution to the related problems of obesity.

Involves little or no added expense to the patient.

May be used with complete safety.

Produces no adverse side effects.

Preferable for the long-term management of a chronic condition.

Brings about reduction of serum cholesterol through physiological processes, as yet not fully understood.

Does not usually generate new compounds in the blood, thus helping the doctor make a more accurate analysis of blood serum cholesterol.

Elevated serum cholesterol has now been linked to an imbalance in the ratio of the type of fat in the diet. Reductions in cholesterol levels have been achieved repeatedly, both in medical research and practice, through the control of total calories and through the replacement of an appreciable percentage of saturated fat by poly-unsaturated vegetable oil.

An important measure in achieving replacement is the consistent use of poly-unsaturated pure vegetable oil in food preparation in place of saturated fat.

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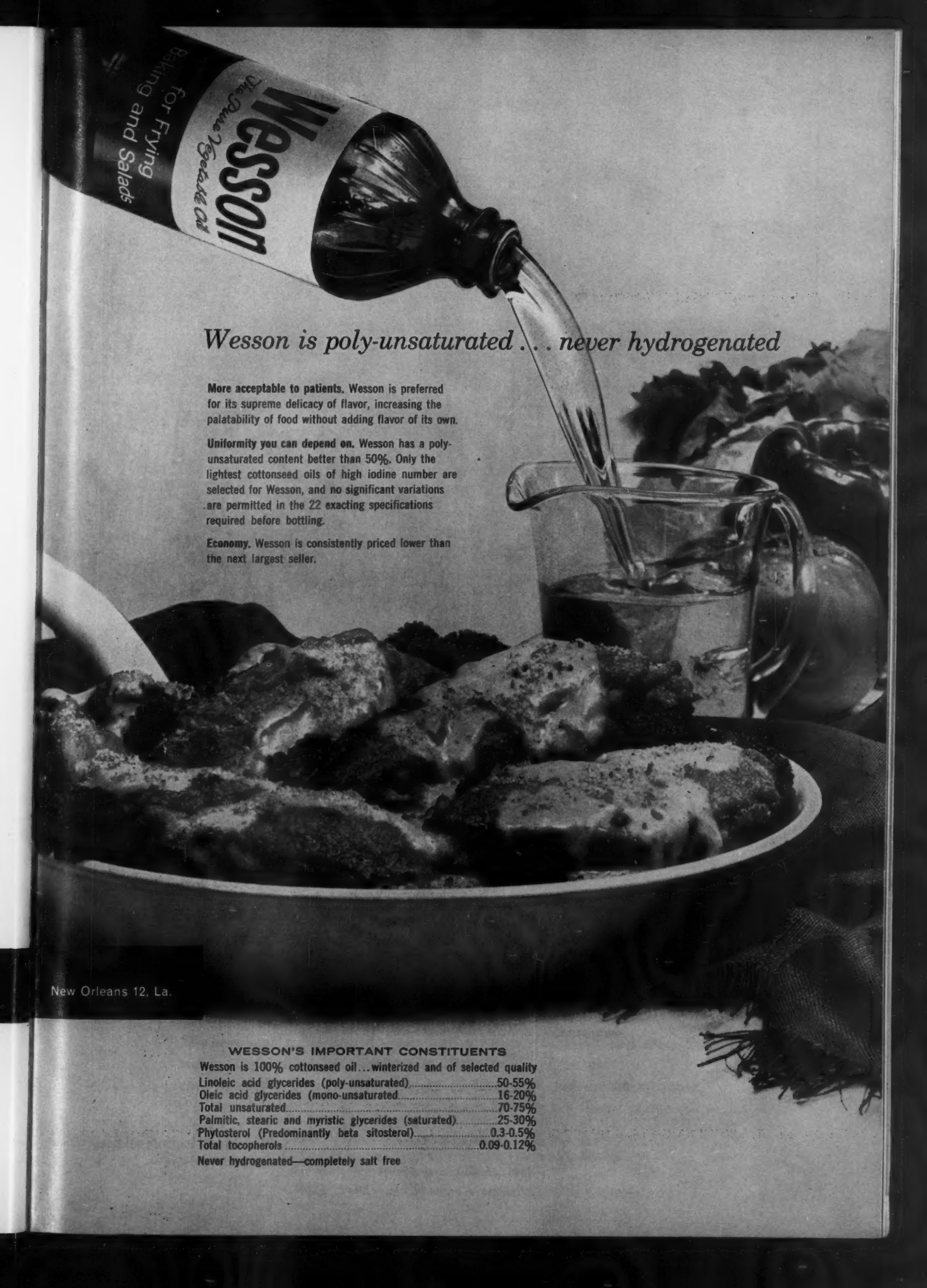
Poly-unsaturated Wesson is unsurpassed by any readily available brand, where a vegetable (salad) oil is medically recommended for a cholesterol depressant regimen.



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Phytosterol (Predominantly beta sitosterol)	0.3-0.5%
Total tocopherols	0.09-0.12%

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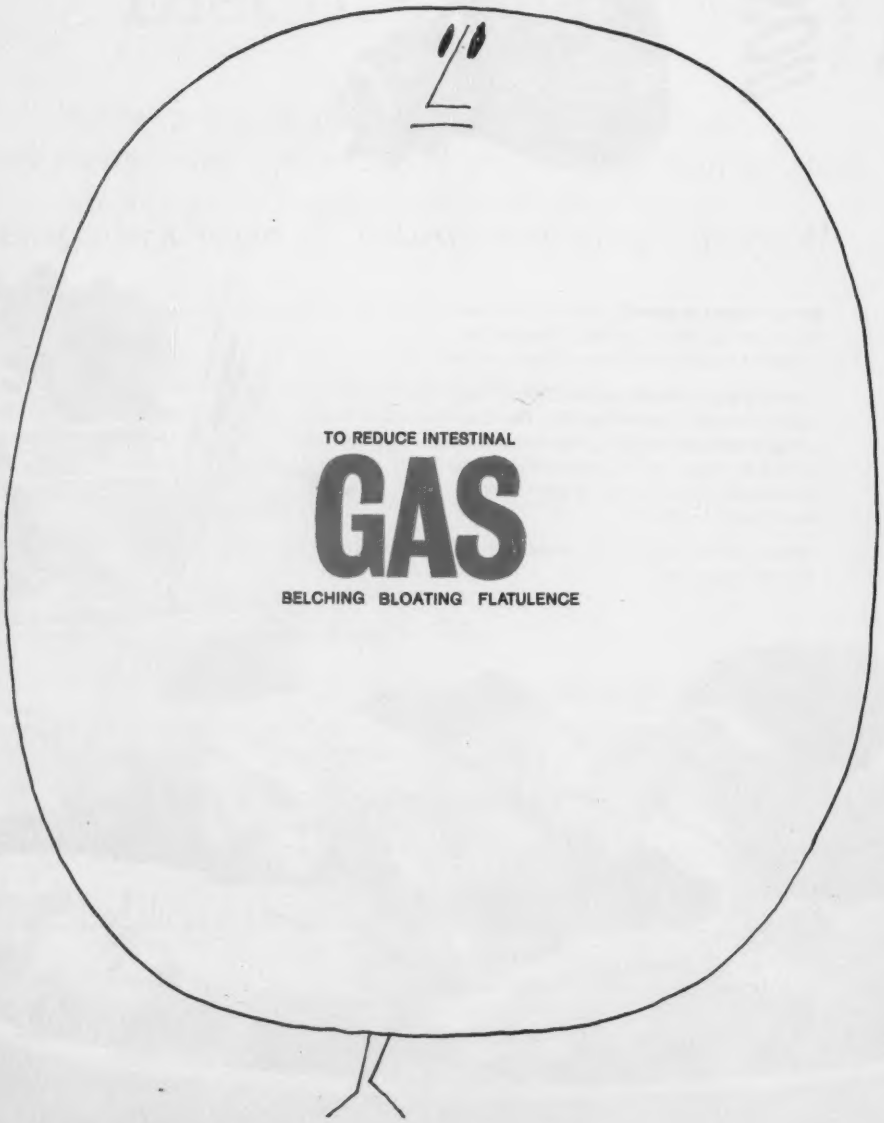

A biochemical compound used to diminish intestinal gas in healthy persons and those patients having digestive disorders ■

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Each Kanulase tablet contains Dorase® 320 units, combined with pepsin, N.F., 150 mg.; glutamic acid HCl, 200 mg.; pancreatin, N.F., 500 mg.; oxbile extract, 100 mg. Dosage: 1 or 2 tablets at mealtime. Supplied: Bottles of 50 tablets.

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relieves pain,
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rapid action • non-narcotic • economical

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Friedman, A. P., and Merritt, H. H.: J.A.M.A. *163*:1111 (Mar. 30) 1957.

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Each contains: **Sandoptal (Allylbarbituric Acid N.F. X) 50 mg. (3/4 gr.), caffeine 40 mg. (2/3 gr.), acetylsalicylic acid 200 mg. (3 gr.), acetophenetidin 130 mg. (2 gr.).**

Dosage: **1 or 2 every four hours, according to need, up to 6 per day.**

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These sensitivity tests were done by the disc method on 310 strains of coagulase-positive staphylococci. Strains were isolated from patients seen in the emergency room. It should be noted that among inpatients, resistant strains were considerably more prevalent.

*Adapted from Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960.

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CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100.

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

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Planolar combines the cumulative antirheumatic and anti-inflammatory action of Plaquenil® with the prompt analgesic action of aspirin.

Each tablet contains: **Plaquenil 60 mg.**
Aspirin 300 mg. (5 grains)

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for detailed information (clinical experience, side effects, precautions, etc.)

HOW SUPPLIED: ***Bottles of 100 tablets.***

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REFERENCES:

1. Scherbel, A. L.; Schuchter, S. L., and Harrison, J. W.: Cleveland Clin. Quart. 24:98, April, 1957.
2. Waine, Hans: Arthritis, rheumatoid, in Conn, H. F.: Current Therapy 1959, Philadelphia, W. B. Saunders Co., 1959, p. 565.

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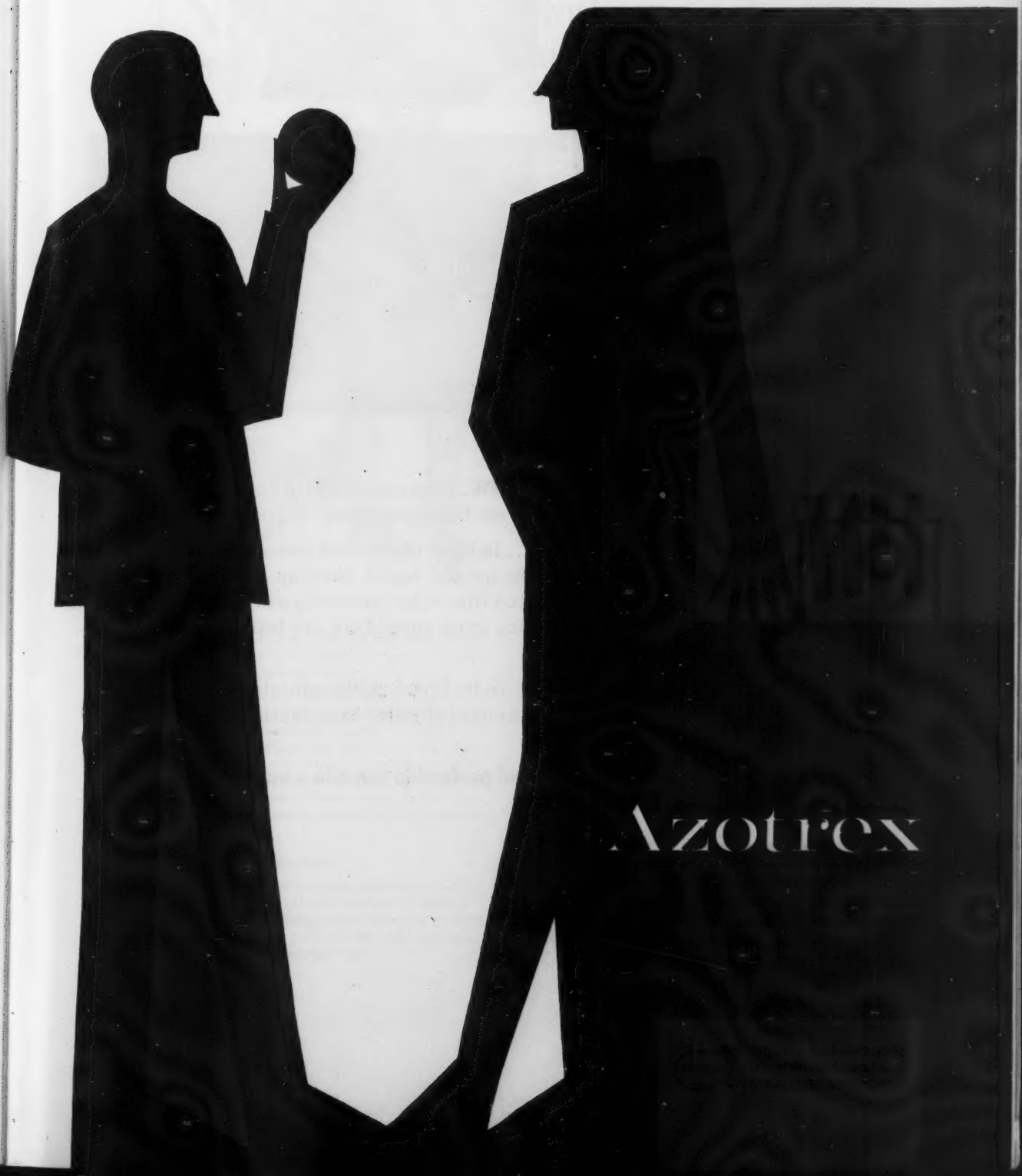
"The chief usually orders AZOTREX. *The azo dye is an excellent urinary analgesic and the sulfamethizole and tetracycline are likely to take care of most of the bugs you find in the urinary tract. If necessary, you can switch to something else after you get the lab findings. But it probably won't be necessary."*



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References: 1. Pitts, R. F., Am. J. Med., 24:745, 1958. 2. Ford, R. V., Cur. Therap. Res., 2:51, 1960.

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The Tavern-on-the-Green

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The Francis-Marion Hotel

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**References available on request.*

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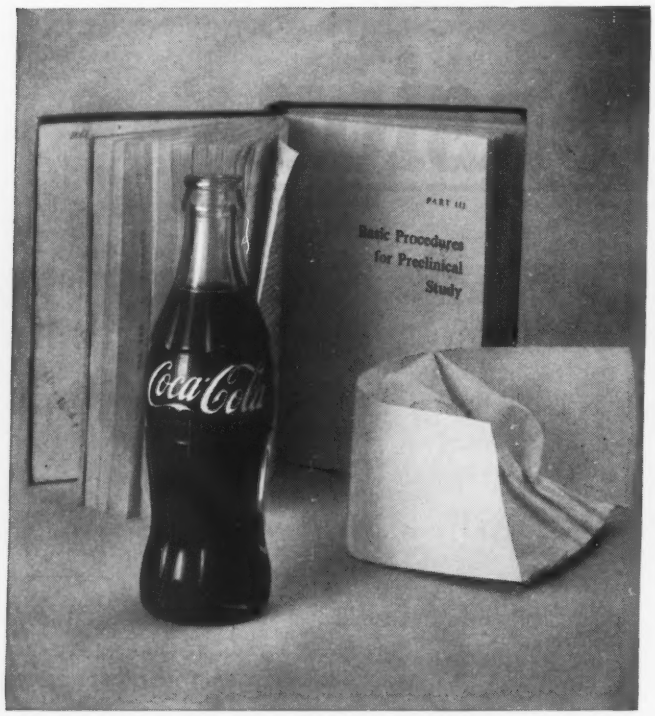

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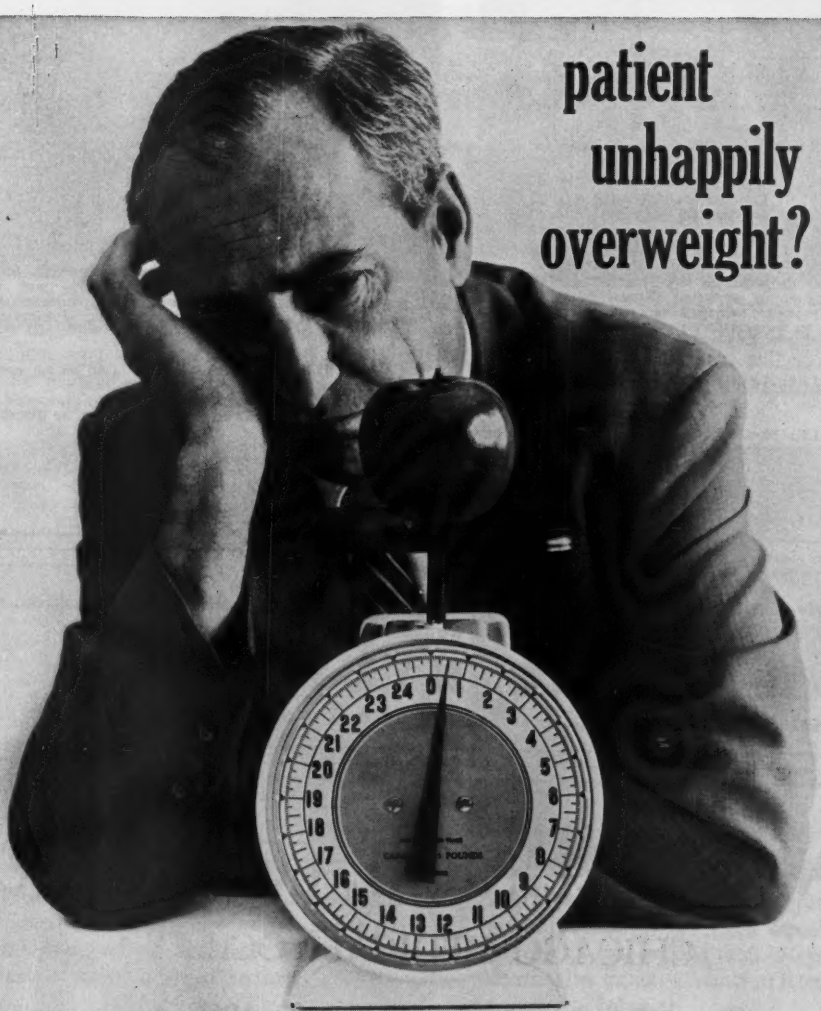

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[1] Douglas, H. S.: West. J. Surg. 59:238 (May) 1951.

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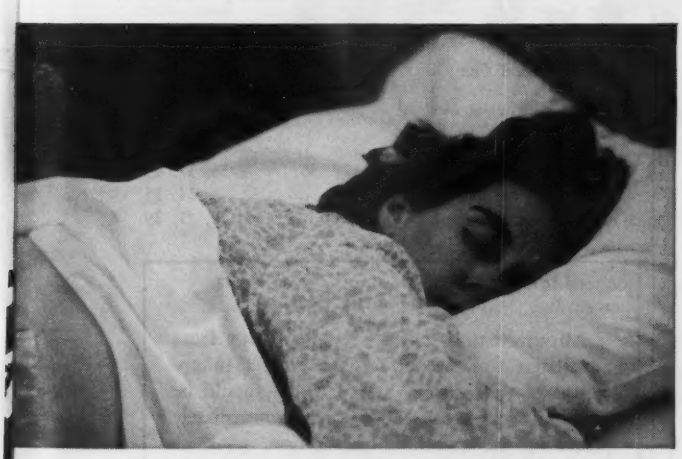

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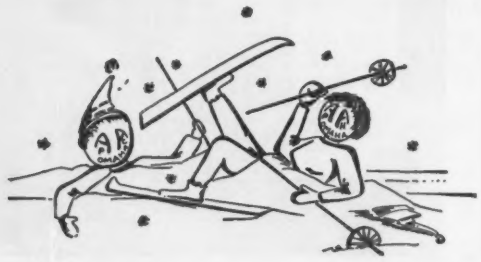

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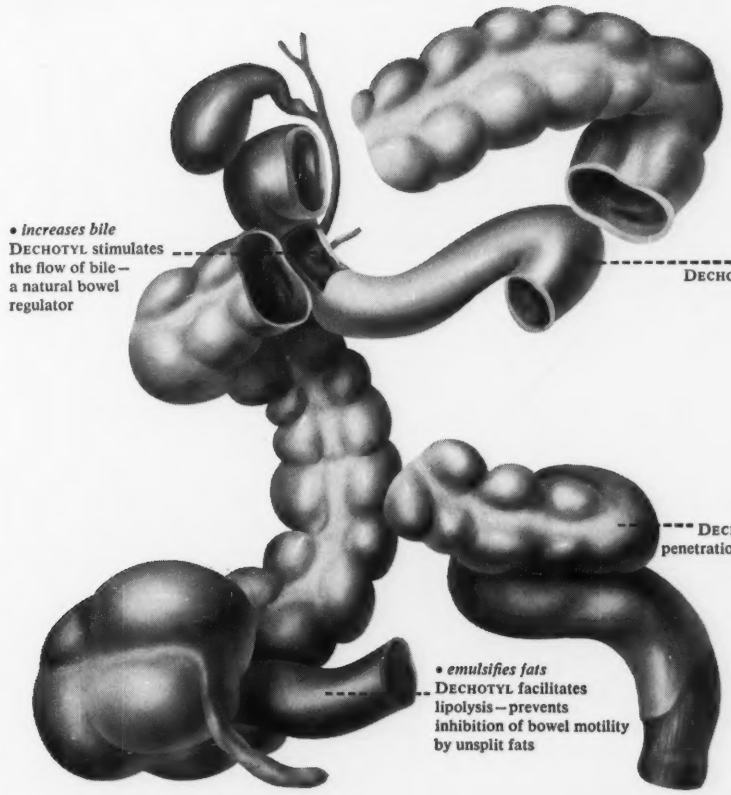
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